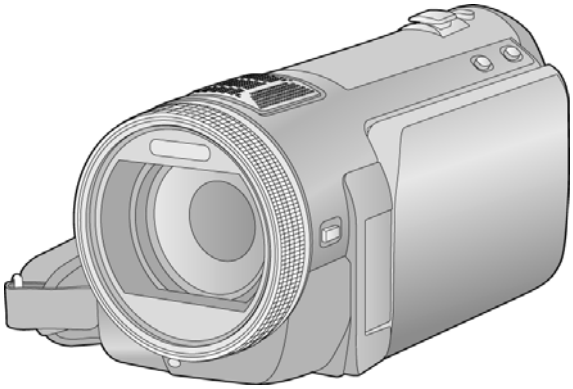
ORDER NO. VM1002004CE
B27

Service Manual

High Definition Video Camera

Model No. **HDC-TM700P**
HDC-TM700PC
HDC-TM700PU
HDC-TM700EB
HDC-TM700EC
HDC-TM700EE
HDC-TM700EF
HDC-TM700EG
HDC-TM700EP
HDC-TM700GC
HDC-TM700GD
HDC-TM700GK
HDC-TM700GT
HDC-SD700EB
HDC-SD700EC
HDC-SD700EE
HDC-SD700EF
HDC-SD700EG
HDC-SD700EP
HDC-SD700GC
HDC-SD700GN
HDC-SD707EG



Vol. 2

Panasonic®

© Panasonic Corporation 2010 Unauthorized copying and distribution is a violation of law.

Colour
[HDC-TM700/SD700]
(K).....Black Type

[HDC-SD707]
(S).....Silver Type
(K).....Black Type

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

TABLE OF CONTENTS

PAGE

1 Safety Precautions ----------3
1.1. General Guidelines ----------3
1.2. Leakage Current Cold Check ----------3
1.3. Leakage Current Hot Check (See Figure 1.)--------3
1.4. How to Discharge the Capacitor on Flash P.C.B.----------4
2 Warning ----------5
2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices ----------5
2.2. How to Recycle the Lithium Ion Battery (U.S. Only)----------5
2.3. Caution for AC Cord (For EB/GC) ----------6
2.4. How to Replace the Lithium Battery----------7
3 Service Navigation----------8
3.1. Introduction ----------8
3.2. General Description About Lead Free Solder (PbF) ----------8
3.3. How to Define the Model Suffix (NTSC or PAL model)----------9
4 Specifications ---------- 10
5 Service Fixture & Tools ---------- 13
5.1. When Replacing the Main P.C.B. ---------- 13
5.2. Service Position ---------- 13

PAGE

1 Safety Precautions

1.1. General Guidelines

1. **IMPORTANT SAFETY NOTICE**
   There are special components used in this equipment which are important for safety. These parts are marked by

   ⚠ in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.
2. An Isolation Transformer should always be used during the servicing of AC Adaptor whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks. It will also protect AC Adaptor from being damaged by accidental shorting that may occur during servicing.
3. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
4. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
5. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.2. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1 MΩ and 5.2 MΩ. When the exposed metal does not have a return path to the chassis, the reading must be infinity.

1.3. Leakage Current Hot Check (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5 kΩ, 10 W resistor, in parallel with a 0.15 μF capacitor, between each exposed metallic part on the set and a good earth ground, as shown in Figure 1.
3. Use an AC voltmeter, with 1 kΩ/V or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 V RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 mA. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

Hot-Check Circuit

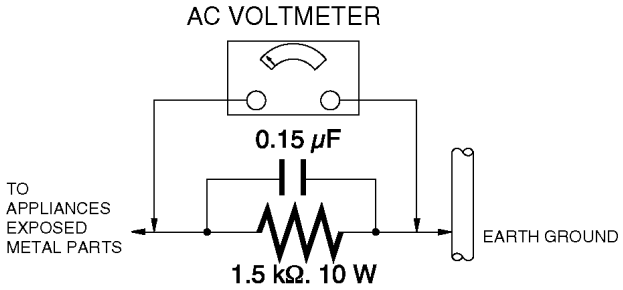


Figure. 1

1.4. How to Discharge the Capacitor on Flash P.C.B.

CAUTION:

1. **Be sure to discharge the capacitor on FLASH P.C.B..**
2. **Be careful of the high voltage circuit on FLASH P.C.B. when servicing.**

[Discharging Procedure]

1. Refer to the disassemble procedure and Remove the necessary parts/unit.
2. Put the insulation tube onto the lead part of Resistor (ERG5SJ102:1kΩ /5W).
   (an equivalent type of resistor may be used.)
3. Put the resistor between both terminals of capacitor on FLASH P.C.B. for approx. 5 seconds.
4. After discharging confirm that the capacitor voltage is lower than 10V using a voltmeter.

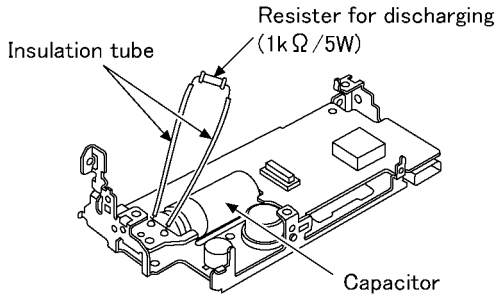


Fig. F1

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an antistatic solder removal device. Some solder removal devices not classified as "antistatic (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION :
   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

2.2. How to Recycle the Lithium Ion Battery (U.S. Only)

ENGLISH

A lithium ion/polymer battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

FRANÇAIS

L'appareil que vous vous êtes procuré est alimenté par une batterie au lithium-ion/lithium-polymère. Pour des renseignements sur le recyclage de la batterie, veuillez composer le 1-800-8-BATTERY.

2.3. Caution for AC Cord (For EB/GC)

2.3.1. Information for Your Safety

IMPORTANT

Your attention is drawn to the fact that recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

WARNING

To reduce the risk of fire or shock hazard, do not expose this equipment to rain or moisture.

CAUTION

To reduce the risk of fire or shock hazard and annoying interference, use the recommended accessories only.

FOR YOUR SAFETY

DO NOT REMOVE THE OUTER COVER

To prevent electric shock, do not remove the cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

2.3.2. Caution for AC Mains Lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three-pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amperes and it is approved by ASTA or BSI to BS1362
Check for the ASTA mark or the BSI mark on the body of the fuse.

ASTA mark	BSI mark

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local Panasonic Dealer.

If the fitted moulded plug is unsuitable for the socket outlet in your home then the fuse should be removed and the plug cut off and disposed of safety.
There is a danger of severe electrical shock if the cut off plug is inserted into any 13-ampere socket.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt, please consult a qualified electrician.

2.3.2.1. Important

The wires in this mains lead are coloured in accordance with the following code:

Blue	Neutral
Brown	Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

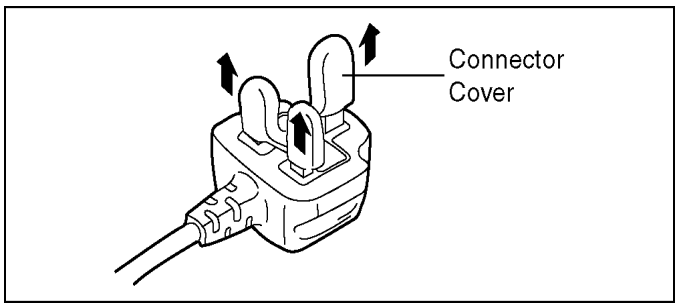
The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol.

Earth Symbol	⏚

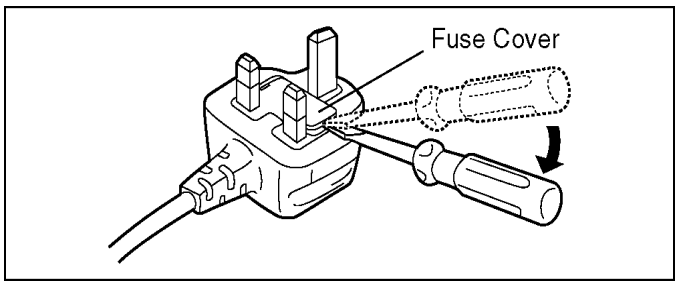
2.3.2.2. Before Use

Remove the Connector Cover as follows.

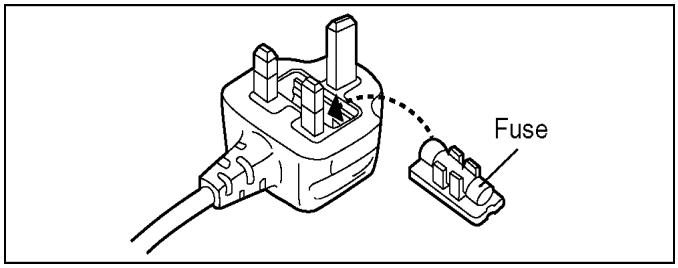


2.3.2.3. How to Replace the Fuse

1. Remove the Fuse Cover with a screwdriver.



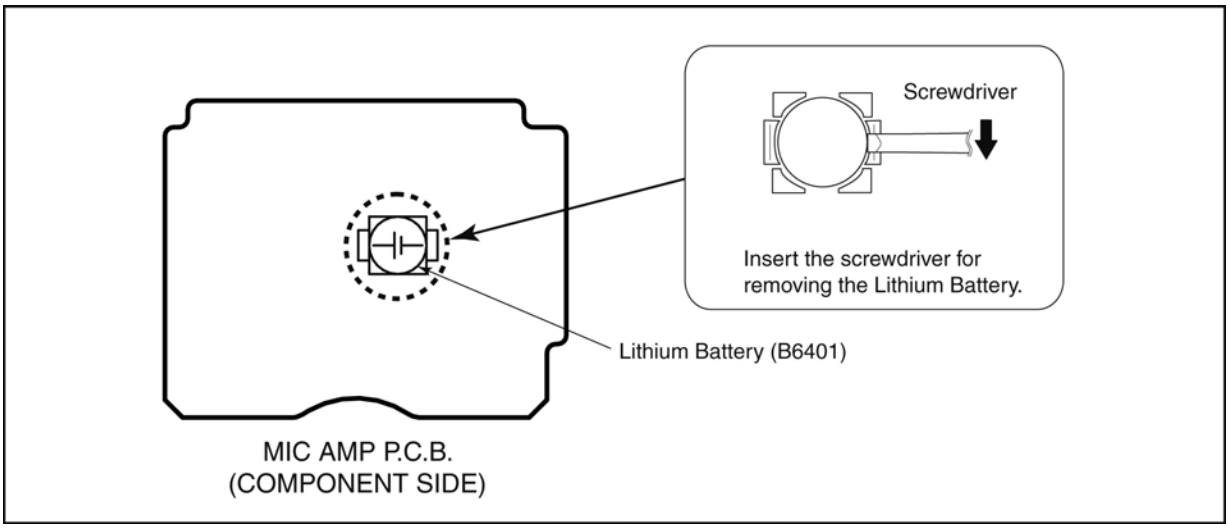
2. Replace the fuse and attach the Fuse cover.



2.4. How to Replace the Lithium Battery

2.4.1. Replacement Procedure

1. Remove the MIC AMP P.C.B.. (Refer to Disassembly Procedures.)
2. Remove the Lithium battery (Ref. No. “B6401” at component side of MIC AMP P.C.B.) and then replace it into new one.



NOTE:

This Lithium battery is a critical component.
(Type No.: ML-614S/ZTK **Manufactured by Energy Company, Panasonic Corporation**)
It must never be subjected to excessive heat or discharge.
It must therefore only be fitted in requirement designed specifically for its use.
Replacement batteries must be of same type and manufacture.
They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.
Do not attempt to re-charge the old battery or re-use it for any other purpose.
It should be disposed of in waste products destined for burial rather than incineration.

(For English)

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer’s instructions.

(For German)

ACHTUNG

Explosionsgefahr bei falschem Anbringen der Batterie. Ersetzen Sie nur mit einem äquivalentem vom Hersteller empfohlenem Typ.
Behandeln Sie gebrauchte Batterien nach den Anweisungen des Herstellers.

(For French)

MISE EN GARDE

Une batterie de remplacement inappropriée peut exploser. Ne remplacez qu’avec une batterie identique ou d’un type recommandé par le fabricant. L’élimination des batteries usées doit être faite conformément aux instructions du manufacturier.

NOTE:

Above caution is applicable for a battery pack which is for HDC-TM700/SD700/SD707 series, as well.

1. Battery Pack for this model.
2. Button-type battery for Remote controller (CR2025: Being supplied from Energy Company, Panasonic Corporation).

3 Service Navigation

3.1. Introduction

This service manual contains technical information, which allow service personnel's to understand and service this model.
Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, the information will be followed by service manual to be controlled with original service manual.

3.2. General Description About Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.
The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30°C (86°F) more than that of the normal solder.

Distinction of P.C.B. Lead Free Solder being used

The letter of "PbF" is printed either foil side or components side on the P.C.B. using the lead free solder.(See right figure)	PbF

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
  (Definition: The letter of "PbF" is printed on the P.C.B. using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the P.C.B. cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30°C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
  RFKZ03D01KS----------(0.3mm 100g Reel)
  RFKZ06D01KS----------(0.6mm 100g Reel)
  RFKZ10D01KS----------(1.0mm 100g Reel)

Note

* Ingredient: tin (Sn) 96.5%, silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

3.3. How to Define the Model Suffix (NTSC or PAL model)

There are nine kinds of HDC-TM700/SD700/SD707.

- a) HDC-TM700 (Japan domestic model)
- b) HDC-TM700P
- c) HDC-TM700PC
- d) HDC-TM700EB/EC/EF/EG/EP, SD700EB/EC/EF/EG/EP/GN, SD707EG
- e) HDC-TM700EE, SD700EE
- f) HDC-TM700GT
- g) HDC-TM700GK
- h) HDC-TM700GD
- i) HDC-TM700PU/GC, SD700GC

What is the difference is that the “INITIAL SETTING” data which is stored in Flash ROM mounted on Main P.C.B..

3.3.1. Defining methods:

To define the model suffix to be serviced, refer to the rating label which is putted on the Unit.

a) HDC-TM700 (Japan domestic model)

The nameplate for this model show the following Safety registration mark.

b) HDC-TM700P

The nameplate for this model show the following Safety registration mark.

c) HDC-TM700PC

The nameplate for this model show the following Safety registration mark.

d) HDC-TM700EB/EC/EF/EG/EP, SD700EB/EC/EF/EG/EP/GN, SD707EG

The nameplate for these models show the following Safety registration mark.

e) HDC-TM700EE, SD700EE

The nameplate for these models show the following Safety registration mark.

f) HDC-TM700GT

The nameplate for this model show the following Safety registration mark.

g) HDC-TM700GK

The nameplate for this model show the following Safety registration mark.

h) HDC-TM700GD

The nameplate for this model show the following Safety registration mark.

i) HDC-TM700PU/GC, SD700GC

The nameplate for these models do not show any above Safety registration mark.

NOTE:

After replacing the MAIN P.C.B., be sure to achieve adjustment.

The adjustment instruction is available at “software download” on the “Support Information from NWBG/VDBG-AVC” web-site in “TSN system”, together with Maintenance software.

4 Specifications

High Definition Video Camera
Information for your safety

Power source:	DC 9.3 V (When using AC adaptor) DC 7.2 V (When using battery)
Power consumption:	Recording: 6.0 W

Signal system	1080/60p, 1080/60i (NTSC areas) 1080/50p, 1080/50i (PAL areas)
Recording format	1080/60p: Original format (NTSC areas) 1080/50p: Original format (PAL areas) HA/HG/HX/HE: AVCHD format compliant
Image sensor	1/4.1″ 3MOS image sensor Total: 3050 K×3 Effective pixels: Motion picture: 2530 K×3 (16:9) Still picture: 2320 K×3 (4:3), 2630 K×3 (3:2), 2530 K×3 (16:9)
Lens	Auto Iris, F1.5 to F2.8 Focal length: 3.45 mm to 41.4 mm Macro (Full range AF) 35 mm equivalent: Motion picture: 35 mm to 420 mm (16:9) Still picture: 38.8 mm to 466 mm (4:3) 35.7 mm to 428 mm (3:2) 35 mm to 420 mm (16:9) Minimum focus distance: Normal: Approx. 4 cm (1.6″) (Wide)/Approx. 1.2 m (3.9 feet) (Tele) Tele macro: Approx. 70 cm (28″) (Tele) Intelligent auto Macro: Approx. 1 cm (0.4″) (Wide)/Approx. 70 cm (28″) (Tele)
Filter diameter	46 mm
Zoom	12× Optical Zoom, 18× i.Zoom, 30×/700× Digital Zoom

Monitor	3″ wide LCD monitor (Approx. 230 K dots)
Viewfinder	0.27″ wide EVF (Approx. 123 K dots)
Microphone	5.1 channel surround microphone (with a zoom microphone/ focus microphone function)
Speaker	1 round speaker, dynamic type
White balance adjustment	Auto tracking white balance system
Standard illumination	1,400 lx
Minimum required illumination	Approx. 1.6 lx (1/30 in Low light mode) (NTSC areas) Approx. 1 lx with the Color night rec function (NTSC areas) Approx. 1.6 lx (1/25 in Low light mode) (PAL areas) Approx. 1 lx with the colour night view function (PAL areas)
AV multi connector video output level	Component video out put level: Y: 1.0 Vp-p, 75 Ω Pb: 0.7 Vp-p, 75 Ω Pr: 0.7 Vp-p, 75 Ω AV video output level: 1.0 Vp-p, 75 Ω, NTSC system (NTSC areas) 1.0 Vp-p, 75 Ω, PAL system (PAL areas)
HDMI mini connector video output level	HDMI™ (x.v.Color™) 1080p/1080i/480p (NTSC areas) HDMI™ (V.1.3a with x.v.Colour™) 1080p/1080i/576p (PAL areas)
AV multi connector audio output level (Line)	316 mV, 600 Ω, 2 ch
Headphone output	77 mV, 32 Ω (Stereo mini jack)
HDMI mini connector audio output level	Dolby Digital/Linear PCM
MIC input	−70 dBV (Mic sensitivity −50 dB equivalent, 0 dB=1 V/Pa, 1 kHz) (Stereo mini jack)
USB — **SD card**	Read only (No copyright protection support) (EB/EC/EF/EG/EP areas) Read/Write (No copyright protection support) (Other areas)
USB — **Built-in memory**	HDC-TM700 Read only
USB	Hi-Speed USB (USB 2.0), USB terminal Type Mini AB USB host function (for DVD burner)
Flash	Available range: Approx. 1.0 m to 2.5 m (3.3 feet to 8.2 feet)

Dimensions	66 mm (W)×69 mm (H)×138 mm (D) [2.59″ (W)×2.71″ (H)×5.43″ (D)] (excluding projecting parts)
Mass (Weight)	HDC-TM700 Approx. 380 g (Approx. 0.84 lbs.) [without battery (supplied)] HDC-SD700 HDC-SD707 Approx. 375 g [without battery (supplied) and an SD card (optional)]
Mass (Weight) in operation	HDC-TM700 Approx. 440 g (Approx. 0.97 lbs.) [with battery (supplied)] HDC-SD700 HDC-SD707 Approx. 435 g [with battery (supplied) and an SD card (optional)]
Operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Operating humidity	10% to 80%
Battery operation time	Refer to "Charging and recording time"

Motion pictures

Recording media	**SD card**	SD Memory Card (FAT12 and FAT16 system compliant) SDHC Memory Card (FAT32 system compliant) SDXC Memory Card (exFAT system compliant) Refer to "Cards that you can use with this unit"
	Built-in memory	HDC-TM700 32 GB
Compression		MPEG-4 AVC/H.264
Recording mode and transfer rate		1080/60p: Approx. 28 Mbps (VBR) (NTSC areas) 1080/50p: Approx. 28 Mbps (VBR) (PAL areas) HA: Approx. 17 Mbps (VBR) HG: Approx. 13 Mbps (VBR) HX: Approx. 9 Mbps (VBR) HE: Approx. 5 Mbps (VBR) Refer to "Recording modes/approximate recordable time"
Picture size		1080/60p: 1920×1080/60p (NTSC areas) HA/HG/HX/HE: 1920×1080/60i (NTSC areas) 1080/50p: 1920×1080/50p (PAL areas) HA/HG/HX/HE: 1920×1080/50i (PAL areas)
Audio compression		Dolby Digital/5.1 ch (built-in microphone), 2 ch (built-in microphone/external microphone)

Still pictures

Recording media	**SD card**	SD Memory Card (FAT12 and FAT16 system compliant) SDHC Memory Card (FAT32 system compliant) SDXC Memory Card (exFAT system compliant) Refer to "Cards that you can use with this unit"
	Built-in memory	HDC-TM700 32 GB
Compression		JPEG (Design rule for Camera File system, based on Exif 2.2 standard), DPOF corresponding
Picture size		Picture aspect [4:3]: 4032×3024/3200×2400/2560×1920/640×480 Picture aspect [3:2]: 4608×3072/3600×2400/2880×1920 Picture aspect [16:9]: 4864×2736/3840×2160/3072×1728/1920×1080 Refer to "Number of recordable pictures"

AC adaptor
Information for your safety

Power source:	AC 110 V to 240 V, 50/60 Hz
Power consumption:	19 W
DC output:	DC 9.3 V, 1.2 A (Unit operation) DC 8.4 V, 0.65 A (Battery charging)

Dimensions	92 mm (W)×33 mm (H)×61 mm (D) [3.6″ (W)×1.3″ (H)×2.4″ (D)]
Mass (Weight)	Approx. 115 g (Approx. 0.25 lbs.)

Specifications may change without prior notice.

Charging and recording time

■ **Charging/Recording time**

● Temperature: 25 °C (77 °F)/humidity: 60%

NTSC areas				
Battery model number [Voltage/Capacity (minimum)]	**Charging time**	**Recording mode**	**Maximum continuous recordable time**	**Actual recordable time**
Supplied battery/ VW-VBG130 (optional) [7.2 V/1250 mAh]	2 h 35 min	1080/60p	1 h 35 min	55 min
		HA, HG, HX, HE	1 h 40 min	1 h
VW-VBG260 (optional) [7.2 V/2500 mAh]	4 h 40 min	1080/60p	3 h	1 h 50 min
		HA, HG, HX, HE	3 h 10 min	1 h 55 min
VW-VBG6 (optional)* [7.2 V/5400 mAh]	9 h 25 min	1080/60p	7 h 30 min	4 h 40 min
		HA, HG, HX	7 h 50 min	4 h 50 min
		HE	7 h 55 min	4 h 55 min

PAL areas				
Battery model number [Voltage/Capacity (minimum)]	**Charging time**	**Recording mode**	**Maximum continuously recordable time**	**Actual recordable time**
Supplied battery/ VW-VBG130 (optional) [7.2 V/1250 mAh]	2 h 35 min	1080/50p, HA, HG, HX	1 h 40 min	1 h
		HE		1 h 5 min
VW-VBG260 (optional) [7.2 V/2500 mAh]	4 h 40 min	1080/50p	3 h 10 min	1 h 55 min
		HA, HG, HX	3 h 15 min	2 h
		HE	3 h 20 min	
VW-VBG6 (optional)* [7.2 V/5400 mAh]	9 h 25 min	1080/50p	7 h 50 min	4 h 50 min
		HA	8 h 5 min	5 h
		HG, HX	8 h 10 min	
		HE		5 h 5 min

* The battery pack holder kit VW-VH04 (optional) is necessary.

● These times are approximations.

● **The indicated charging time is for when the battery has been discharged completely. Charging time and recordable time vary depending on the usage conditions such as high/low temperature.**

● The actual recordable time refers to the recordable time when repeatedly starting/stopping recording, turning the unit on/off, moving the zoom lever etc.

● The batteries heat up after use or charging. This is not a malfunction.

Cards that you can use with this unit

Use SD cards conforming to Class 4 or higher of the SD Speed Class Rating* for motion picture recording.

Card type	Capacity	Motion picture recording	Still picture recording
SD Memory Card	8 MB/16 MB	Cannot be used.	Can be used.
	32 MB/64 MB/ 128 MB/256 MB	Cannot be guaranteed in operation. The recording may suddenly stop during motion picture recording depending on the SD card you use.	
	512 MB/1 GB/ 2 GB	Can be used.	
SDHC Memory Card	4 GB/6 GB/8 GB/ 12 GB/16 GB/ 24 GB/32 GB		
SDXC Memory Card	48 GB/64 GB		

* The SD Speed Class Rating is the speed standard for successive writes.

Recording modes/approximate recordable time

● SD cards are only mentioned with their main memory size.

		Ⓐ ←				→ Ⓑ
Recording mode (NTSC areas)		**1080/60p**	**HA**	**HG**	**HX**	**HE**
(PAL areas)		**1080/50p**	**HA**	**HG**	**HX**	**HE**
Picture size		**1920×1080**	**1920×1080**	**1920×1080**	**1920×1080**	**1920×1080**
SD card	**4 GB**	19 min	30 min	40 min	1 h	1 h 30 min
	8 GB	40 min	1 h	1 h 20 min	2 h	3 h 20 min
	16 GB	1 h 20 min	2 h	2 h 40 min	4 h 10 min	6 h 40 min
	32 GB	2 h 40 min	4 h 10 min	5 h 30 min	8 h 20 min	13 h 40 min
	48 GB	4 h	6 h 20 min	8 h 10 min	12 h 30 min	20 h 20 min
	64 GB	5 h 20 min	8 h 30 min	11 h	16 h 50 min	27 h 30 min
HDC-TM700 **Built-in memory**	**32 GB**	2 h 40 min	4 h 10 min	5 h 30 min	8 h 20 min	13 h 40 min

Ⓐ Favors image quality

Ⓑ Favors recording time

● The default setting is HG Mode.

● Maximum continuously recordable time for one scene: 12 hours

● The recording is paused once when the recording time for one scene exceeds 12 hours, and the recording will automatically resume after a few seconds.

● If a recording with a lot of action is recorded, the recording time is reduced.

● The recordable time may be reduced if recording of short scene is repeated.

● Use time in the row of 4 GB in above table as a guideline for the time that can be copied onto one DVD disc (4.7 GB).

Number of recordable pictures

● SD cards are only mentioned with their main memory size.

(In Still Picture Recording Mode)

Aspect ratio		4:3							
Picture size		12.2M 4032×3024		7.7M 3200×2400		4.9M 2560×1920		0.3M 640×480	
Picture quality									
SD card	512 MB	70	110	110	180	180	290	3600	6100
	1 GB	140	220	220	360	360	580	7400	12000
	2 GB	300	450	450	740	740	1200	15000	25000
	4 GB	610	940	940	1500	1500	2400	30000	50000
	8 GB	1200	1900	1900	3000	3000	4800	60500	102000
	16 GB	2500	3900	3900	6200	6200	9700	122000	205000
	24 GB	3600	5800	5800	9100	9100	14000	179000	301000
	32 GB	5000	7900	7900	12500	12500	19500	246000	414000
	48 GB	7200	11000	11000	18000	18000	28000	364000	613000
	64 GB	10000	15800	15800	25000	25000	39000	492000	829000
HDC-TM700 Built-in memory	32 GB	5000	7900	7900	12500	12500	19500	246000	414000

Aspect ratio		16:9					
Picture size		13.3M 4864×2736		8.3M 3840×2160		5.9M 3072×1728	
Picture quality							
SD card	512 MB	65	100	100	160	160	270
	1 GB	130	200	200	320	320	540
	2 GB	270	400	400	700	700	1100
	4 GB	550	850	850	1420	1420	2200
	8 GB	1100	1700	1700	2800	2800	4500
	16 GB	2200	3400	3400	5600	5600	9000
	24 GB	3300	5100	5100	8400	8400	13000
	32 GB	4500	7000	7000	11500	11500	18200
	48 GB	6600	10000	10000	17000	17000	26000
	64 GB	9000	14000	14000	23000	23000	36400
HDC-TM700 Built-in memory	32 GB	4500	7000	7000	11500	11500	18200

Aspect ratio		3:2					
Picture size		14.2M 4608×3072		8.6M 3600×2400		5.5M 2880×1920	
Picture quality							
SD card	512 MB	60	90	100	160	160	250
	1 GB	120	180	200	320	320	500
	2 GB	240	390	400	650	650	1000
	4 GB	500	800	850	1300	1300	2000
	8 GB	1000	1600	1700	2700	2700	4200
	16 GB	2100	3300	3400	5500	5500	8500
	24 GB	3100	4900	5100	8100	8100	12700
	32 GB	4200	6700	7000	11000	11000	17500
	48 GB	6200	9800	10000	16000	16000	25000
	64 GB	8400	13400	14000	22000	22000	35000
HDC-TM700 Built-in memory	32 GB	4200	6700	7000	11000	11000	17500

(In Motion Picture Recording Mode)

Aspect ratio		16:9					
Picture size		13.3M 4864×2736		8.3M 3840×2160		2.1M 1920×1080	
Picture quality							
SD card	512 MB	65	100	100	160	440	690
	1 GB	130	200	200	320	900	1400
	2 GB	270	400	400	700	1800	2800
	4 GB	550	850	850	1420	3600	5600
	8 GB	1100	1700	1700	2800	7300	11000
	16 GB	2200	3400	3400	5600	14000	23000
	24 GB	3300	5100	5100	8400	21000	34000
	32 GB	4500	7000	7000	11500	29000	46000
	48 GB	6600	10000	10000	17000	44000	69000
	64 GB	9000	14000	14000	23000	59000	93000
HDC-TM700 Built-in memory	32 GB	4500	7000	7000	11500	29000	46000

● The numbers shown in the table are approximations.

● **The number of recordable pictures depends on whether and are used together and on the subject being recorded.**

● Maximum number of recordable pictures that can be displayed is 99999.
If the number of recordable pictures exceeds 99999, the number will not change when the picture is taken until the number of recordable pictures gets less than 99999.

● The memory capacity indicated on the label of an SD card is the total of the capacity for copyright protection and management and the capacity which can be used on the unit, a PC etc.

5 Service Fixture & Tools

5.1. When Replacing the Main P.C.B.

After replacing the MAIN P.C.B., be sure to achieve adjustment.

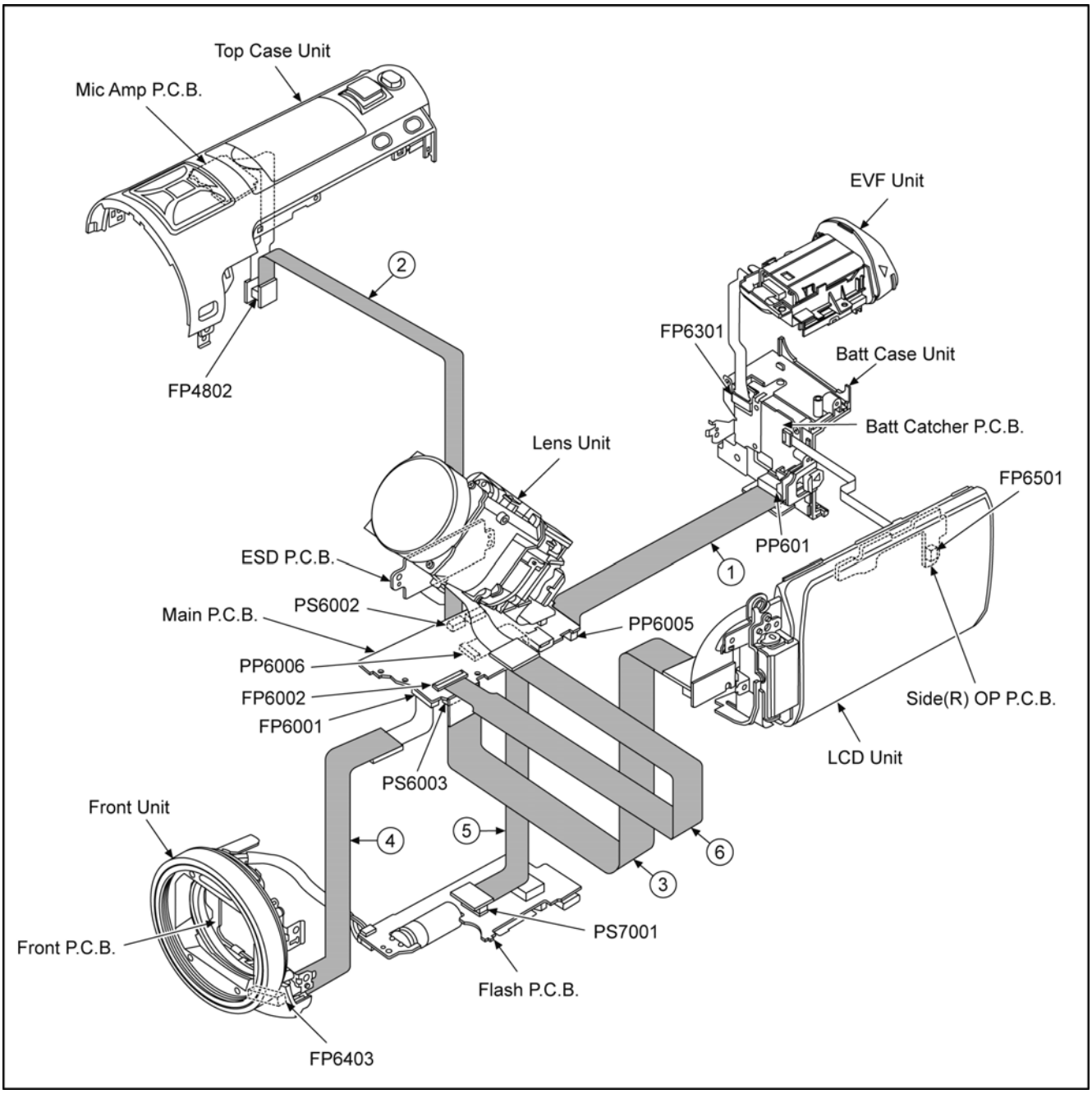
The adjustment instruction is available at “software download” on the “Support Information from NWBG/VDBG-AVC” web-site in “TSN system”, together with Maintenance software.

5.2. Service Position

This Service Position is used for checking and replacing parts. Use the following Extension cables for servicing.

Table S1 Extension Cable List

No.	Parts No.	Connection	Form
1	RFKZ0444	PP6005(MAIN) - PP601(BATT CATCHER)	50PIN 0.5 B to B
2	RFKZ0342	PS6002(MAIN) - FP4802(MIC AMP)	20PIN 0.5 B to B
3	VFK1933	PS6003(MAIN) - MONITOR FPC	34PIN 0.5 B to B
4	VFK1950	FP6001(MAIN) - FP6403(FRONT)	33PIN 0.3 FFC
5	RFKZ0343	PP6006(MAIN) - PS7001(FLASH)	30PIN 0.5 B to B
6	RFKZ0416	FP6002(MAIN) - LENS UNIT	41PIN 0.3 FFC



CAUTION-1. (When servicing FLASH P.C.B.)

1. Be sure to discharge the capacitor on FLASH P.C.B..
   Refer to “HOW TO DISCHARGE THE CAPACITOR ON FLASH P.C.B.”.
   The capacitor voltage is not lowered soon even if the AC Cord is unplugged or the battery is removed.
2. Be careful of the high voltage circuit on FLASH P.C.B..
3. DO NOT allow other parts to touch the high voltage circuit on FLASH P.C.B..

VM1002004CE

Service Manual

Diagrams and Replacement Parts List

High Definition Video Camera

Model No.

HDC-TM700P	HDC-TM700EP	HDC-SD700EF
HDC-TM700PC	HDC-TM700GC	HDC-SD700EG
HDC-TM700PU	HDC-TM700GD	HDC-SD700EP
HDC-TM700EB	HDC-TM700GK	HDC-SD700GC
HDC-TM700EC	HDC-TM700GT	HDC-SD700GN
HDC-TM700EE	HDC-SD700EB	HDC-SD707EG
HDC-TM700EF	HDC-SD700EC	
HDC-TM700EG	HDC-SD700EE	

Vol. 2
Colour
[HDC-TM700/SD700]
(K).....Black Type
[HDC-SD707]
(S).....Silver Type
(K).....Black Type

Table of contents

S1. About Indication of The Schematic Diagram S-1
S1.1. Important Safety Notice..... S-1

S2. Voltage Chart S-2
S2.1. Main P.C.B. S-2

S3. Block Diagram..... S-3
S3.1. System Control Block Diagram S-3
S3.2. Video/Audio Signal Process Block Diagram S-4
S3.2.1. Video/Audio Signal Process Block Diagram (1)..... S-4
S3.2.2. Video/Audio Signal Process Block Diagram (2)..... S-5
S3.3. Camera Block Diagram..... S-6
S3.4. Lens Drive Block Diagram..... S-7
S3.5. Power Supply Block Diagram..... S-8

S4. Schematic Diagram..... S-10
S4.1. Main CN Schematic Diagram..... S-10
S4.2. Process Schematic Diagram..... S-14
S4.3. Lens Drive Schematic Diagram..... S-18
S4.4. Syscon Schematic Diagram..... S-22
S4.5. RTC Schematic Diagram S-26
S4.6. Video Schematic Diagram..... S-28
S4.7. AVIO Schematic Diagram..... S-32
S4.8. HDMI Schematic Diagram..... S-33
S4.9. Power Schematic Diagram..... S-34

S5. Print Circuit Board S-38
S5.1. Main P.C.B. S-38
S5.1.1. Main P.C.B. S-38
S5.1.2. Main P.C.B. Address Information S-39

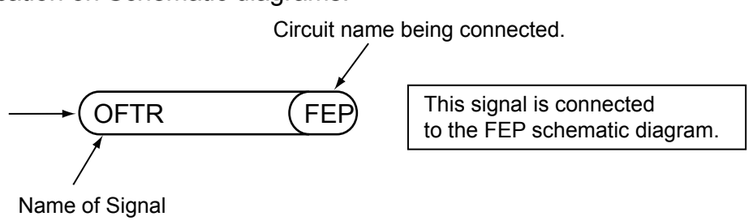
S6. Replacement Parts List S-41

S1. About Indication of The Schematic Diagram

S1.1. Important Safety Notice

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY THE SAME TYPE.

1. Although reference number of the parts is indicated on the P.C.B. drawing and/or schematic diagrams, it is NOT mounted on the P.C.B. when it is displayed with "$" mark.
2. It is only the "Test Round" and no terminal (Pin) is available on the P.C.B. when the TP (Test Point) indicated as "●" mark.
3. The voltage being indicated on the schematic diagram is measured in "Standard-Playback" mode when there is no specify mode is mentioned.
4. Although the voltage and waveform available on here is measured with standard frame, it may be differ from actual measurement due to modification of circuit and so on.
5. The voltage being indicated here may be include observational-error (deviation) due to internal-resistance and/or reactance of equipment. Therefore, handle the value indicated on here as reference.
6. Use the parts number indicated on the Replacement Parts List .
7. Indication on Schematic diagrams:



S2. Voltage Chart

Note) Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

S2.1. Main P.C.B.

REF No.	PIN No.	POWER ON
IC1003	1	8.3
IC1003	2	0
IC1003	3	0.2
IC1003	4	2.9
IC1003	5	5.1
IC1011	1	2.9
IC1011	2	0
IC1011	3	1.3
IC1011	4	5
IC1011	5	8.4
IC1421	1	3.2
IC1421	2	0
IC1421	3	0
IC1421	4	2.9
IC1421	5	3.3
IC1423	1	3.2
IC1423	2	3.3
IC1423	3	0
IC1423	4	0
IC2001	1	0
IC2001	2	2.9
IC2001	3	0
IC2001	4	2.9
IC2002	1	2.9
IC2002	2	0.6
IC2002	3	2.9
IC2002	4	0
IC2002	5	2.9
IC2002	6	2.9
IC2002	7	2.9
IC2002	8	2.9
IC2010	1	2.9
IC2010	2	0
IC2010	3	0
IC2010	4	2.9
IC2010	5	0
IC2010	6	0
IC2010	7	2.9
IC2010	8	2.9
IC2302	1	3.3
IC2302	2	8.4
IC2302	3	0
IC2302	4	0
IC2303	1	0
IC2303	2	8.4
IC2303	3	3.3
IC2303	4	0
IC2303	5	8.4
IC302	1	1.8
IC302	2	2.9
IC302	3	0
IC302	4	2.9
IC302	5	1.5
IC304	1	1.8
IC304	2	0.9
IC304	3	0
IC304	4	0.9
IC304	5	1.8
IC305	1	3.5
IC305	2	0
IC305	3	0
IC305	4	3.3
IC305	5	3.5
IC6001	1	0
IC6001	2	2.9
IC6001	3	0

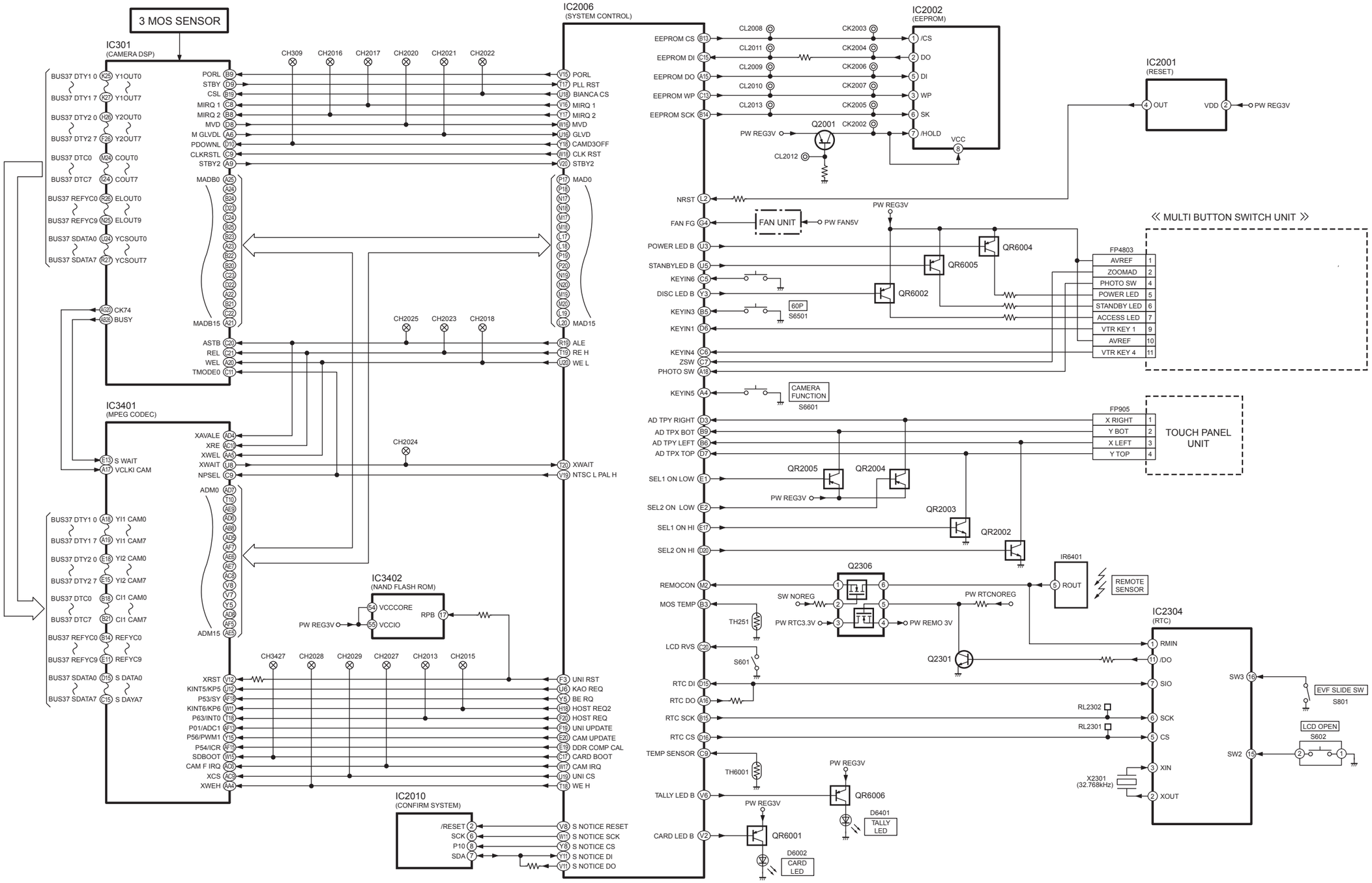
REF No.	PIN No.	POWER ON
IC6001	4	0
IC6001	5	2.9
IC702	1	3.3
IC702	2	0
IC702	3	1.3
IC702	4	5
IC702	5	8.4
Q1002	1	8.4
Q1002	2	8.4
Q1002	3	0
Q1002	4	8.4
Q1002	5	8.4
Q1002	6	8.4
Q1091	E	8.4
Q1091	C	8.4
Q1091	B	7.7
Q1271	S	1.3
Q1271	D	8.4
Q1271	G	2.1
Q1272	1	3.9
Q1272	2	0
Q1272	3	0
Q1272	4	1.3
Q1272	5	1.3
Q1281	1	4.5
Q1281	2	6.9
Q1281	3	0
Q1281	4	2.2
Q1281	5	4.5
Q1281	6	4.5
Q1281	7	8.4
Q1281	8	8.4
Q1282	1	0
Q1282	2	0.3
Q1282	3	4.5
Q1282	4	9.1
Q1282	5	5.1
Q1282	6	5.1
Q1282	7	4.5
Q1282	8	4.5
Q1413	E	5.1
Q1413	C	0
Q1413	B	5.1
Q1414	E	0
Q1414	C	5.1
Q1414	B	0
Q1425	E	0
Q1425	C	8.5
Q1425	B	0
Q1426	E	2.9
Q1426	C	0
Q1426	B	2.9
Q1441	1	0.6
Q1441	2	0
Q1441	3	0.1
Q1441	4	3.3
Q1441	5	0.1
Q1451	E	5.1
Q1451	C	2.7
Q1451	B	4.5
Q1452	1	2.5
Q1452	2	0
Q1452	3	1.8
Q1452	4	2.7
Q1452	5	4.5
Q1491	E	13.4

REF No.	PIN No.	POWER ON
Q1491	C	8.6
Q1491	B	12.9
Q1492	1	2.5
Q1492	2	2.1
Q1492	3	2.6
Q1492	4	8.6
Q1492	5	12.9
Q2001	E	2.9
Q2001	C	2.9
Q2001	B	2.3
Q2301	E	0
Q2301	C	7.7
Q2301	B	0.1
Q2306	1	0.5
Q2306	2	7.6
Q2306	3	3.3
Q2306	4	3.3
Q2306	5	7.7
Q2306	6	0.5
QR1001	E	0
QR1001	C	0
QR1001	B	2.9
QR1002	E	8.4
QR1002	C	8.4
QR1002	B	0
QR1003	E	0
QR1003	C	0
QR1003	B	2.9
QR1091	E	0
QR1091	C	0
QR1091	B	2.9
QR1101	E	0
QR1101	C	6.8
QR1101	B	0
QR1291	E	0
QR1291	C	0.8
QR1291	B	1.2
QR1411	E	5.1
QR1411	C	0
QR1411	B	5.1
QR1451	E	0
QR1451	C	1.5
QR1451	B	0
QR1452	E	0
QR1452	C	1.6
QR1452	B	0
QR1453	E	0
QR1453	C	2.5
QR1453	B	0.1
QR1491	E	8.6
QR1491	C	0
QR1491	B	8.5
QR2002	E	0
QR2002	C	2.5
QR2002	B	0.4
QR2003	E	0
QR2003	C	2.5
QR2003	B	0.4
QR2004	E	2.9
QR2004	C	2.8
QR2004	B	2.5
QR2005	E	2.9
QR2005	C	2.8
QR2005	B	2.5
QR2301	E	3.3
QR2301	C	0

REF No.	PIN No.	POWER ON
QR2301	B	3.3
QR3401	E	0
QR3401	C	2.9
QR3401	B	0
QR3402	E	2.9
QR3402	C	0
QR3402	B	2.9
QR6001	E	2.9
QR6001	C	0
QR6001	B	2.9
QR6002	E	2.9
QR6002	C	-0.6
QR6002	B	2.9
QR6004	E	2.9
QR6004	C	2.8
QR6004	B	0
QR6006	E	2.9
QR6006	C	-0.7
QR6006	B	2.9
QR6051	E	2.9
QR6051	C	-0.5
QR6051	B	2.9
QR775	E	0
QR775	C	2.2
QR775	B	0

S3. Block Diagram

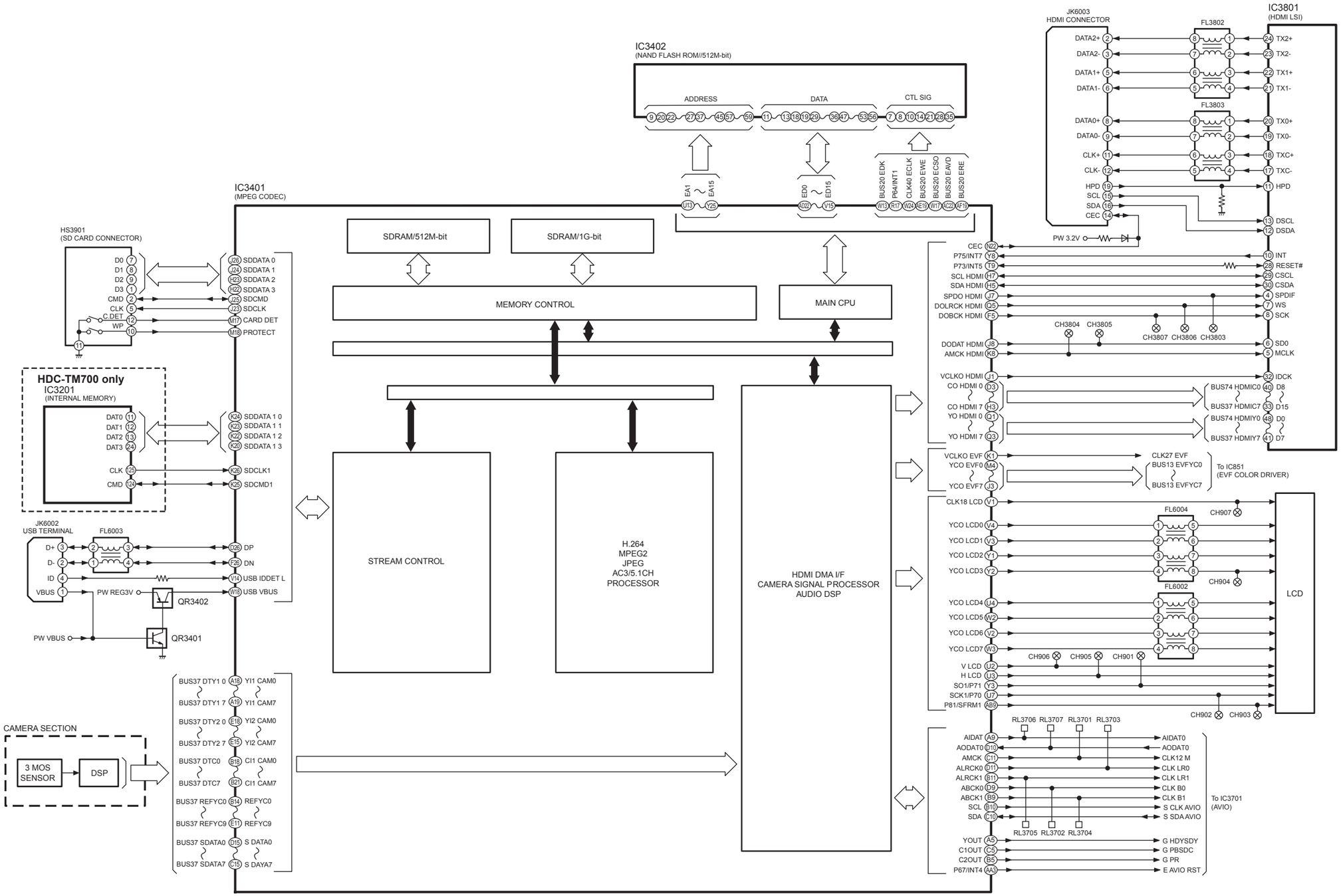
S3.1. System Control Block Diagram



HDC-TM700/SD700/SD707 SYSTEM CONTROL CIRCUIT BLOCK DIAGRAM

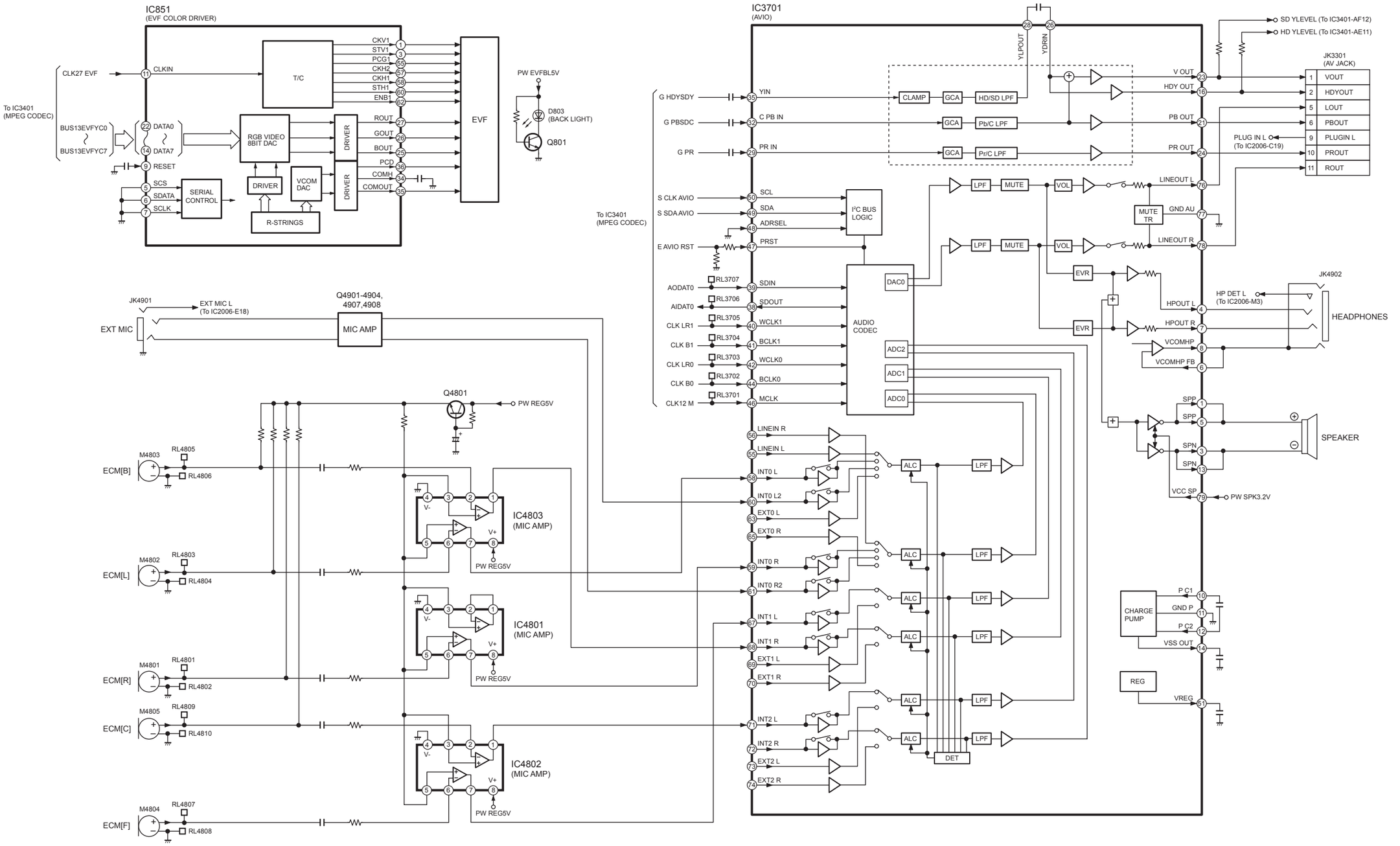
S3.2. Video/Audio Signal Process Block Diagram

S3.2.1. Video/Audio Signal Process Block Diagram (1)



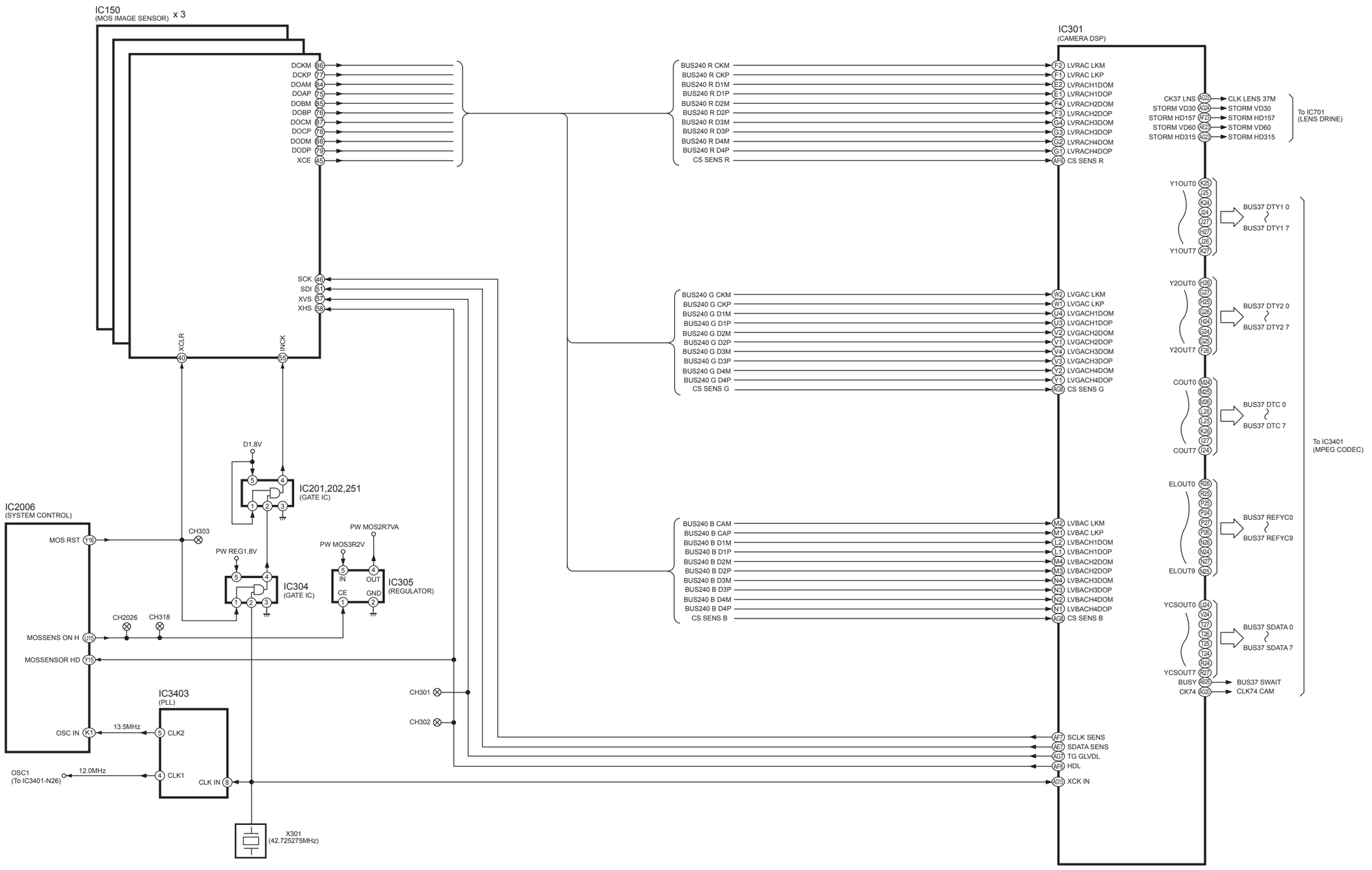
HDC-TM700/SD700/SD707 VIDEO/AUDIO SIGNAL PROCESS(1) CIRCUIT BLOCK DIAGRAM

S3.2.2. Video/Audio Signal Process Block Diagram (2)



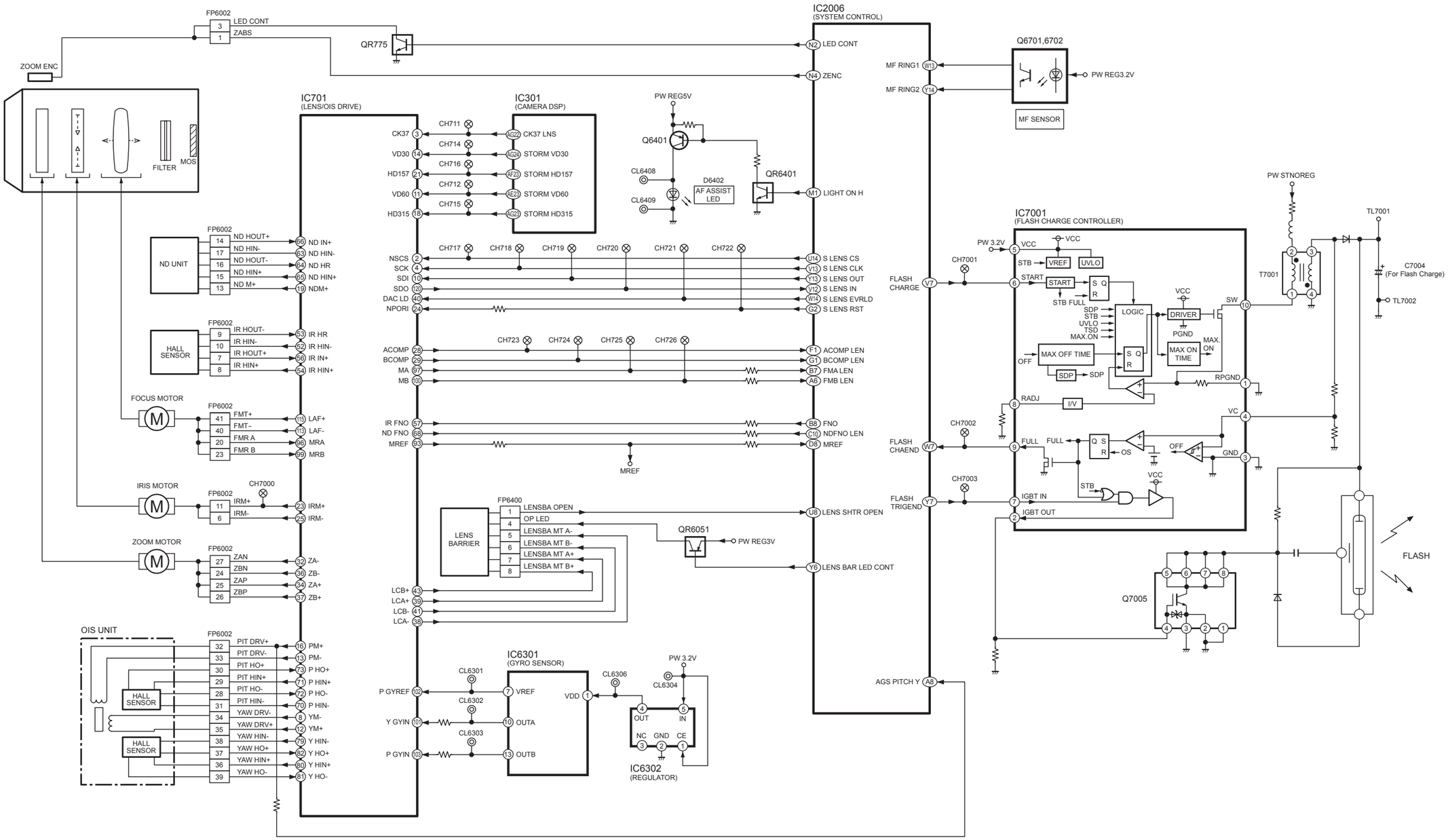
HDC-TM700/SD700/SD707 VIDEO/AUDIO SIGNAL PROCESS(2) CIRCUIT BLOCK DIAGRAM

S3.3. Camera Block Diagram



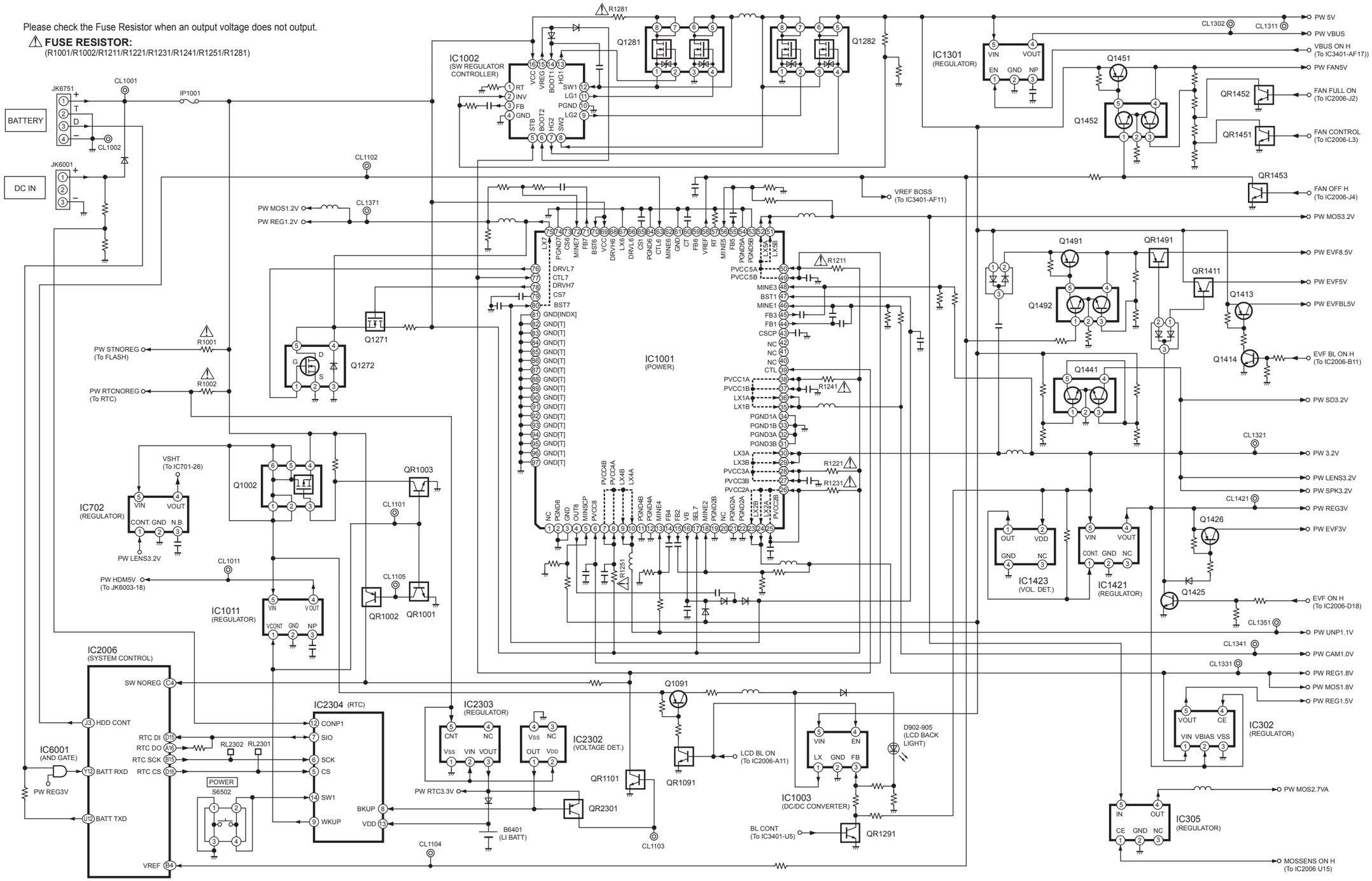
HDC-TM700/SD700/SD707 CAMERA CIRCUIT BLOCK DIAGRAM

S3.4. Lens Drive Block Diagram



HDC-TM700/SD700/SD707 LENS DRIVE CIRCUIT BLOCK DIAGRAM

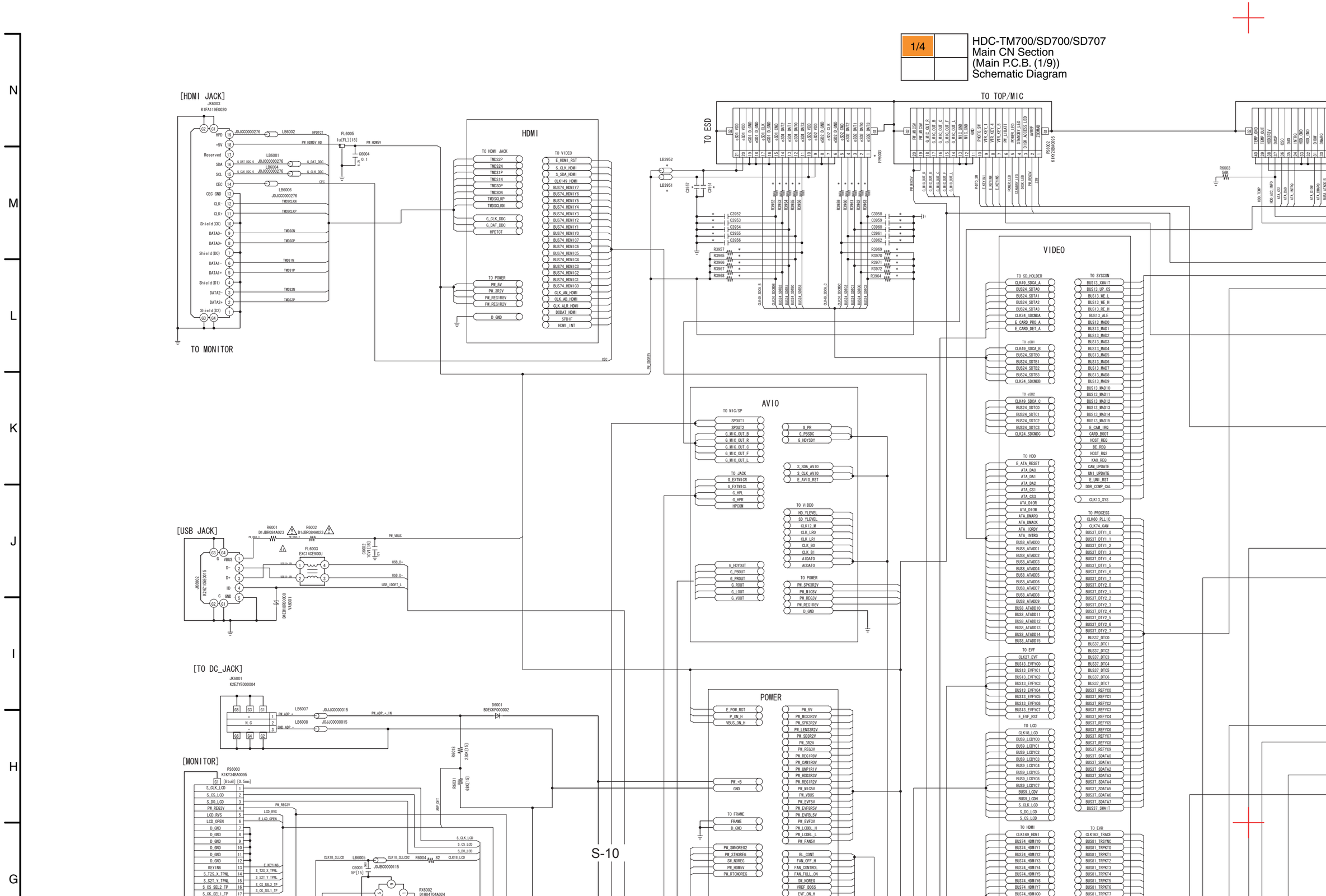
S3.5. Power Supply Block Diagram

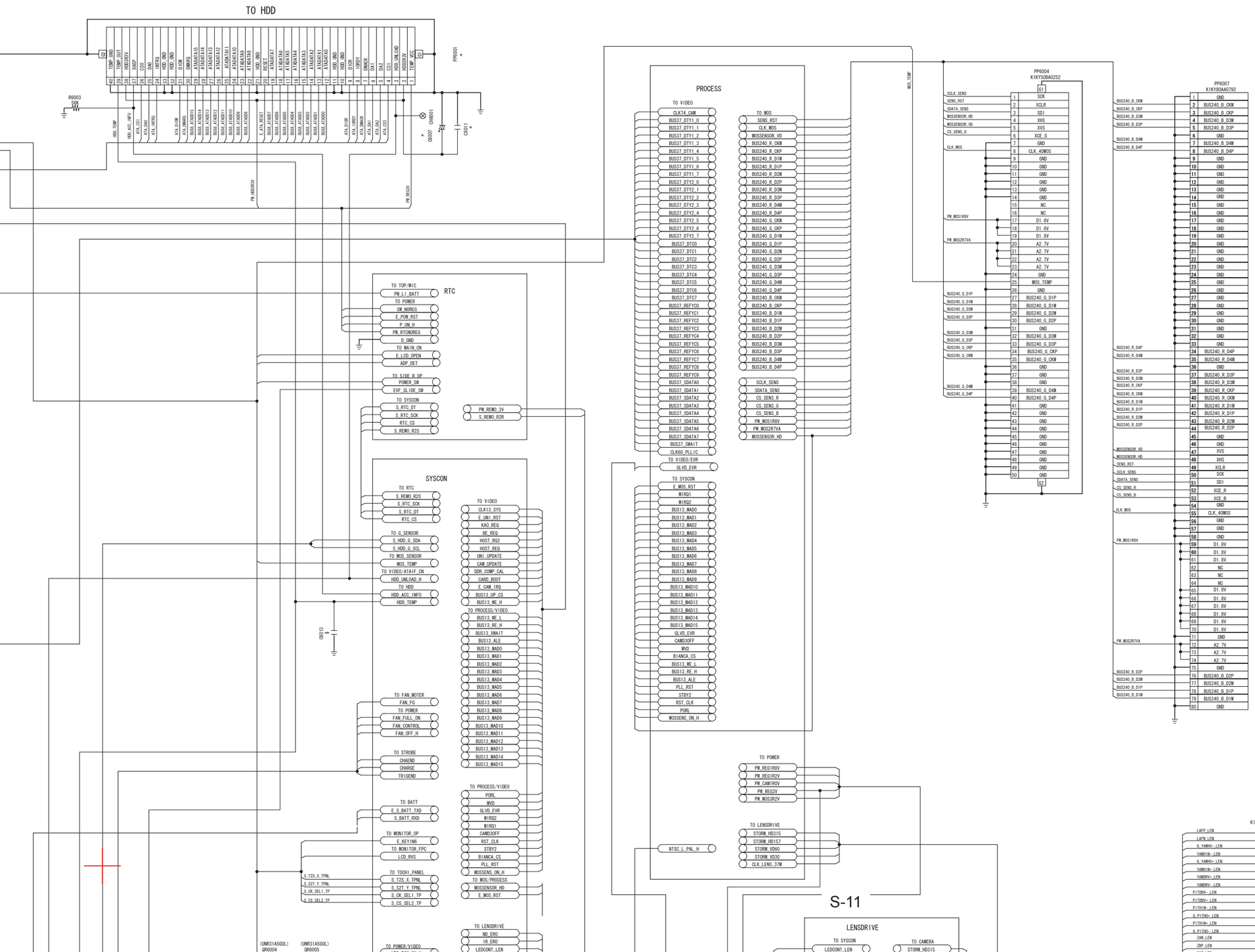


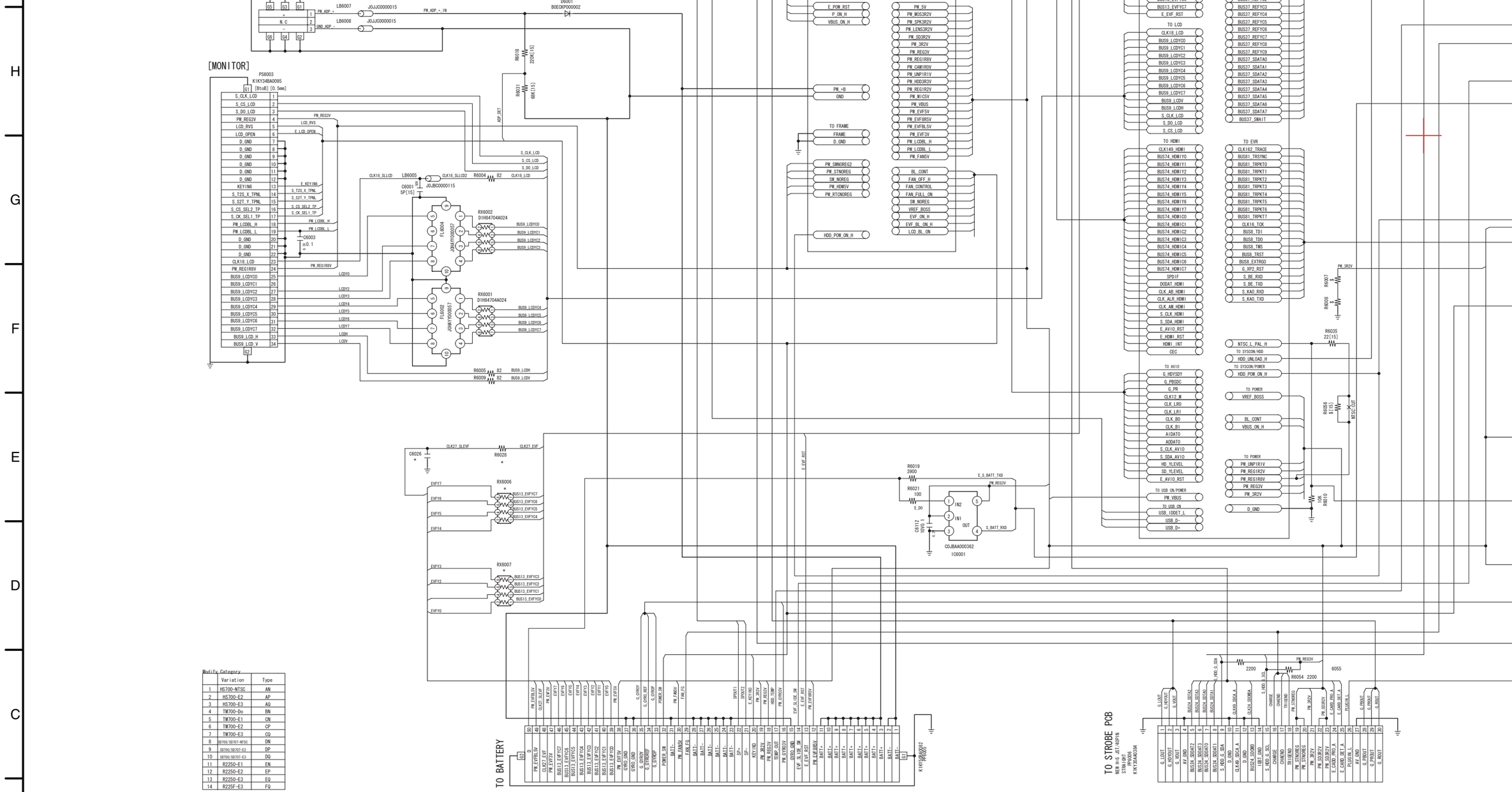
HDC-TM700/SD700/SD707 POWER SUPPLY CIRCUIT BLOCK DIAGRAM

S4. Schematic Diagram

S4.1. Main CN Schematic Diagram




TO HDD
PP6001
R6003
56K
HDD_TEMP
HDD_ACC_INFO
PW_HDD3R3V
PW_REG3V
CQ007
CHP001
CQ011
CQ013
PROCESS
TO VIDEO
TO MOS
TO SYSCON
TO POWER
TO LENSDRIVE
NTSC_L_PAL_H
PP6004
K1KY50BA0252
PP6007
K1KY80AA0792
TO TOP/MIC
PW_LI_BATT
RTC
TO POWER
SW_NOREG
E_POW_RST
P_ON_H
PW_RTCNOREG
D_GND
TO MAIN_CN
E_LCD_OPEN
ADP_DET
TO SIDE_R_OP
POWER_SW
EVF_SLIDE_SW
TO SYSCON
S_RTC_DT
S_RTC_SCK
RTC_CS
S_REMO_R2S
PW_REMO_3V
SYSCON
TO RTC
TO VIDEO
TO G_SENSOR
S_HDD_G_SDA
S_HDD_G_SCL
TO MOS_SENSOR
MOS_TEMP
TO VIDEO/ATAIF_CN
HDD_UNLOAD_H
TO HDD
HDD_ACC_INFO
HDD_TEMP
TO PROCESS/VIDEO
TO FAN_MOTER
FAN_FG
TO POWER
FAN_FULL_ON
FAN_CONTROL
FAN_OFF_H
TO STROBE
CHAEND
CHARGE
TRIGEND
TO BATT
E_S_BATT_TXD
S_BATT_RXD
TO MONITOR_OP
E_KEYIN6
TO MONITOR_FPC
LCD_RVS
TO TOCH1_PANEL
S_T2S_X_TPNL
S_S2T_Y_TPNL
S_CK_SEL1_TP
S_CS_SEL2_TP
TO MOS/PROCESS
TO LENSDRIVE
TO POWER/VIDEO
(UNR31A560L) QR6004
(UNR31A560L) QR6005
S-11
LENSDRIVE
TO SYSCON
TO CAMERA
FP6002
K1MY41BA0235
TO_LENS(Z130)



Modify Category

	Variation	Type
1	HS700-NTSC	AN
2	HS700-E2	AP
3	HS700-E3	AQ
4	TM700-Do	BN
5	TM700-E1	CN
6	TM700-E2	CP
7	TM700-E3	CQ
8	SD700/SD707-NTSC	DN
9	SD700/SD707-E2	DP
10	SD700/SD707-E3	DQ
11	R2250-E1	EN
12	R2250-E2	EP
13	R2250-E3	EQ
14	R225F-E3	FQ

VariationCategory

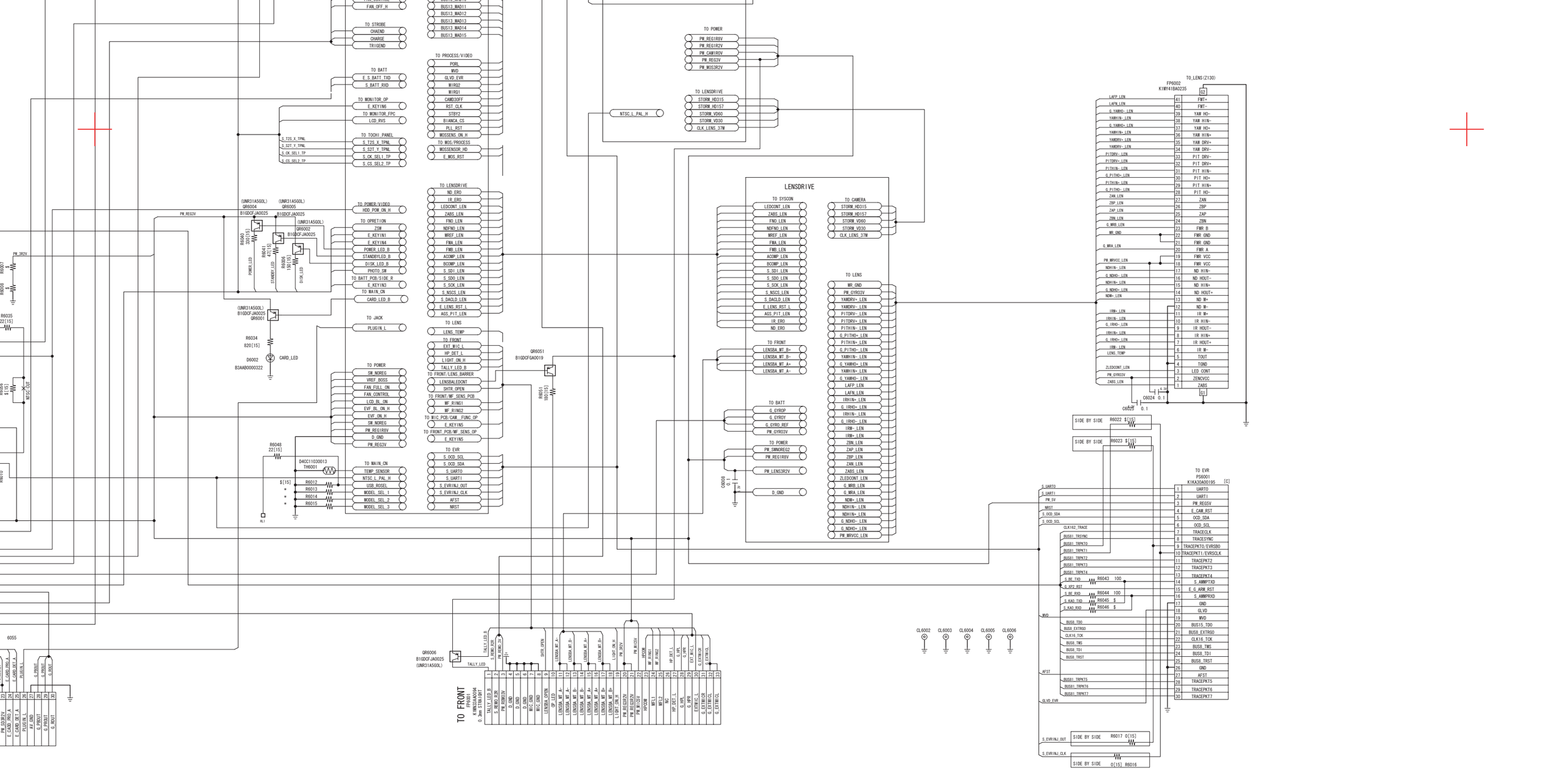
	AN/AP/AQ	BN	CN/CP/CQ	DN/DP/DQ	EN/EP/EQ	FQ
C3951	$	0.1	0.1	$	$	0.1
C3952	$[15]	27P[15]	27P[15]	$[15]	$[15]	27P[15]
C3953	$[15]	27P[15]	27P[15]	$[15]	$[15]	27P[15]
C3954	$[15]	27P[15]	27P[15]	$[15]	$[15]	27P[15]
C3955	$[15]	27P[15]	27P[15]	$[15]	$[15]	27P[15]
C3956	$[15]	27P[15]	27P[15]	$[15]	$[15]	27P[15]
C3957	$	0.1	$	$	$	0.1
C3958	$[15]	27P[15]	$[15]	$[15]	$[15]	27P[15]
C3959	$[15]	27P[15]	$[15]	$[15]	$[15]	27P[15]
C3960	$[15]	27P[15]	$[15]	$[15]	$[15]	27P[15]
C3961	$[15]	27P[15]	$[15]	$[15]	$[15]	27P[15]
C3962	$[15]	27P[15]	$[15]	$[15]	$[15]	27P[15]
C6007	F3FOJ476A032	$[F3FOJ476A032]	$[F3FOJ476A032]	$[F3FOJ476A032]	$[F3FOJ476A032]	$[F3FOJ476A032]
C6011	0.1	$	$	$	$	$
C6026	$[15]	$[15]	$[15]	$[15]	$[15]	$[15]
FP6003	$[K1MY21BA0281]	K1MY21BA0281	K1MY21BA0281	$[K1MY21BA0281]	$[K1MY21BA0281]	K1MY21BA0281
LB3951	$[JOJYCO000051]	JOJYCO000051	$[JOJYCO000051]	$[JOJYCO000051]	$[JOJYCO000051]	JOJYCO000051
LB3952	$[JOJYCO000051]	JOJYCO000051	JOJYCO000051	$[JOJYCO000051]	$[JOJYCO000051]	JOJYCO000051
PP6001	K1KA40BA0052	$[K1KA40BA0052]	$[K1KA40BA0052]	$[K1KA40BA0052]	$[K1KA40BA0052]	$[K1KA40BA0052]

VariationCategory1

	AN/AP/AQ	BN	CN/CP/CQ	DN/DP/DQ	EN/EP/EQ	FQ
R3952	$	3.3	3.3	$	$	3.3
R3953	$	3.3	3.3	$	$	3.3
R3954	$	3.3	3.3	$	$	3.3
R3955	$	3.3	3.3	$	$	3.3
R3956	$	3.3	3.3	$	$	3.3
R3957	$	10K	10K	$	$	10K
R3959	$	3.3	$	$	$	33
R3960	$	3.3	$	$	$	33
R3961	$	3.3	$	$	$	33
R3962	$	3.3	$	$	$	33
R3963	$	3.3	$	$	$	33
R3964	$	10K	$	$	$	10K
R3965	$	10K	10K	$	$	10K
R3966	$	10K	10K	$	$	10K
R3967	$	10K	10K	$	$	10K
R3968	$	10K	10K	$	$	10K
R3969	$	10K	$	$	$	10K
R3970	$	10K	$	$	$	10K
R3971	$	10K	$	$	$	10K
R3972	$	10K	$	$	$	10K
R6013	$[15]	$[15]	$[15]	22[15]	22[15]	$[15]
R6014	$[15]	22[15]	22[15]	$[15]	$[15]	22[15]
R6015	22[15]	22[15]	22[15]	22[15]	$[15]	$[15]
R6028	82[15]	82[15]	82[15]	82[15]	$[15]	$[15]
RX6006	D1H81014A024	D1H81014A024	D1H81014A024	D1H81014A024	$[D1H81014A024]	$[D1H81014A024]
RX6007	D1H81014A024	D1H81014A024	D1H81014A024	D1H81014A024	$[D1H81014A024]	$[D1H81014A024]

HDC-TM700/SD700/SD707
Main CN Section
(Main P.C.B. (1/9))
Schematic Diagram

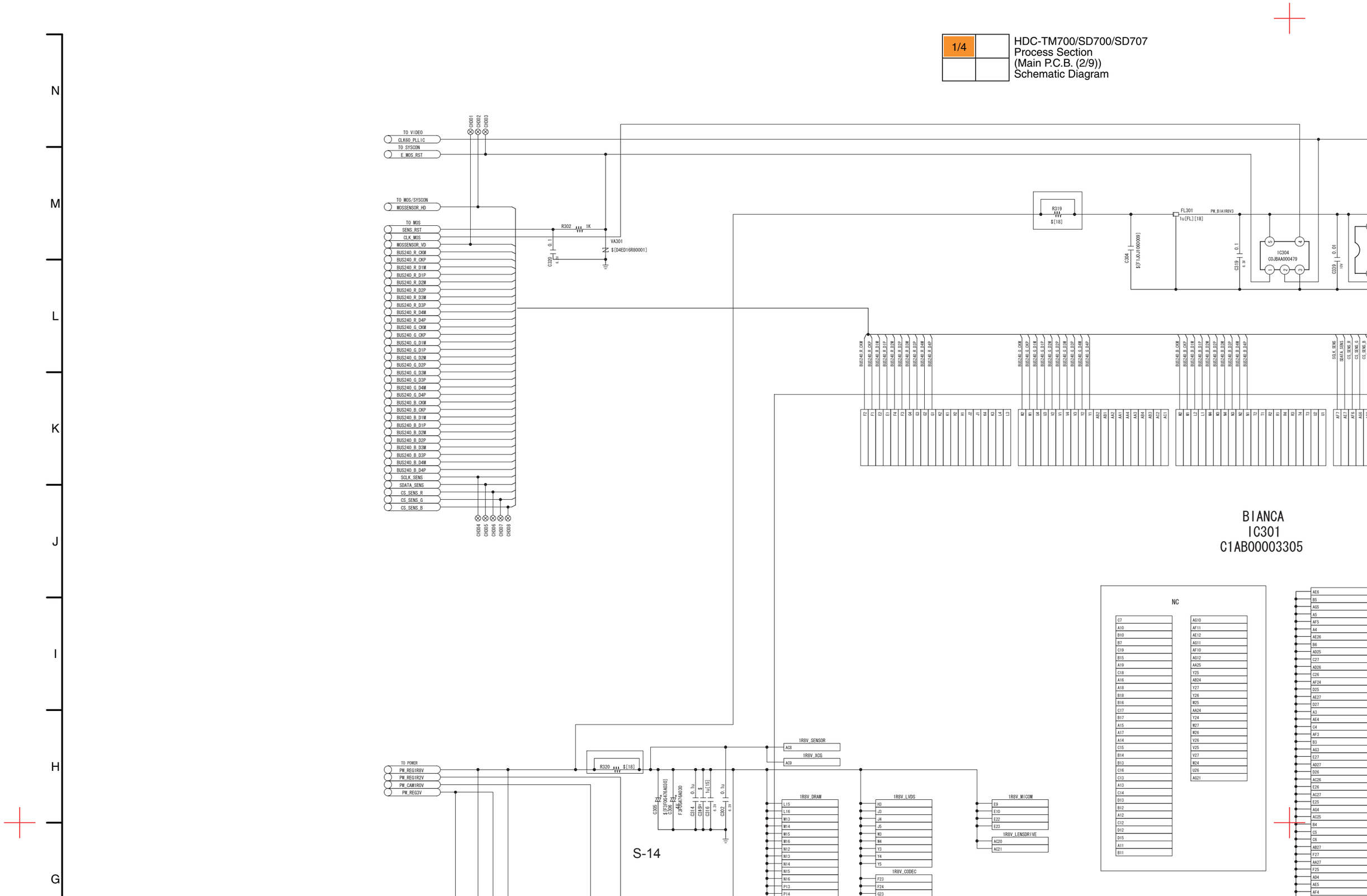
3/4



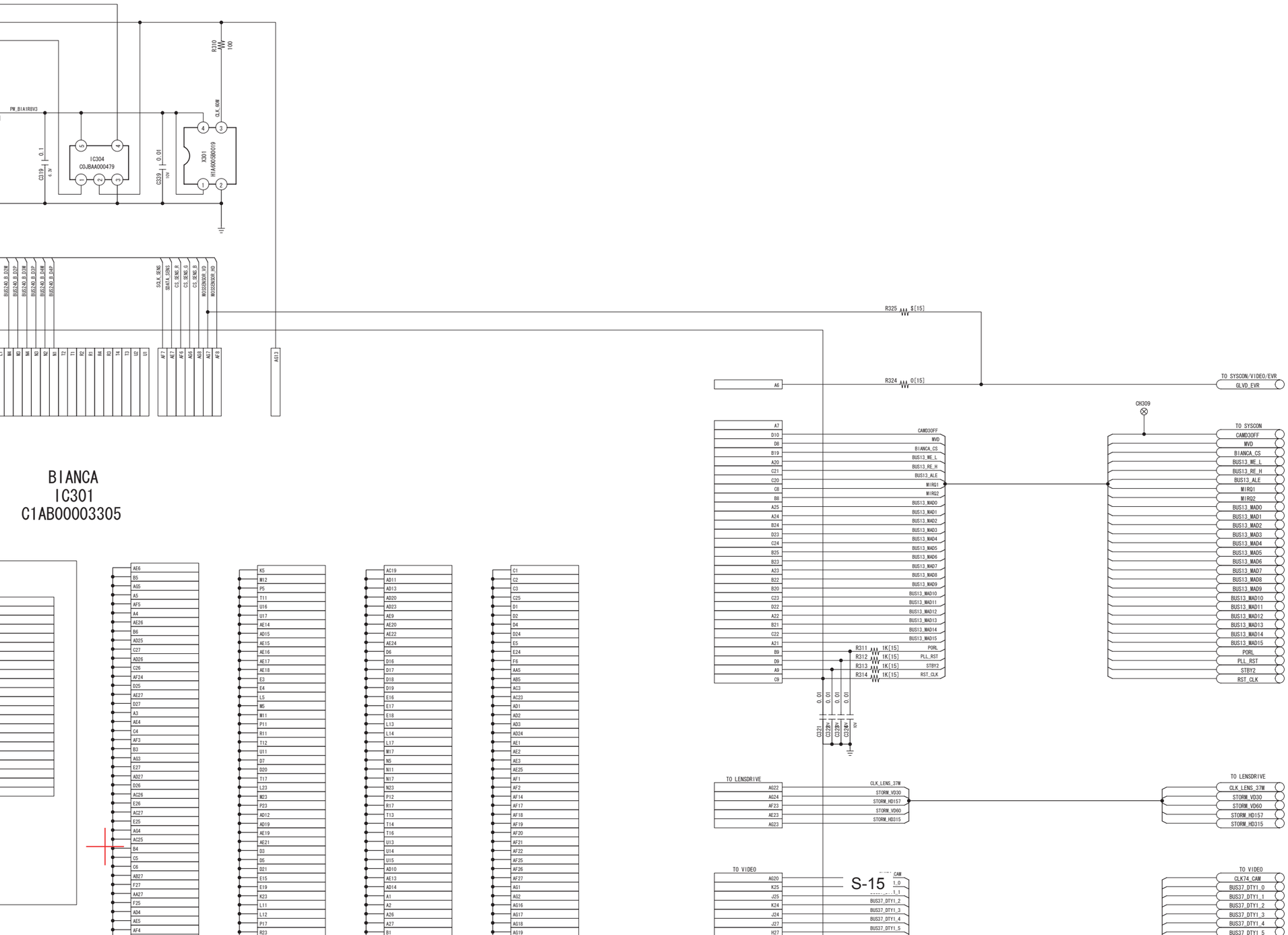
HDC-TM700/SD700/SD707
Main CN Section
(Main P.C.B. (1/9))
Schematic Diagram

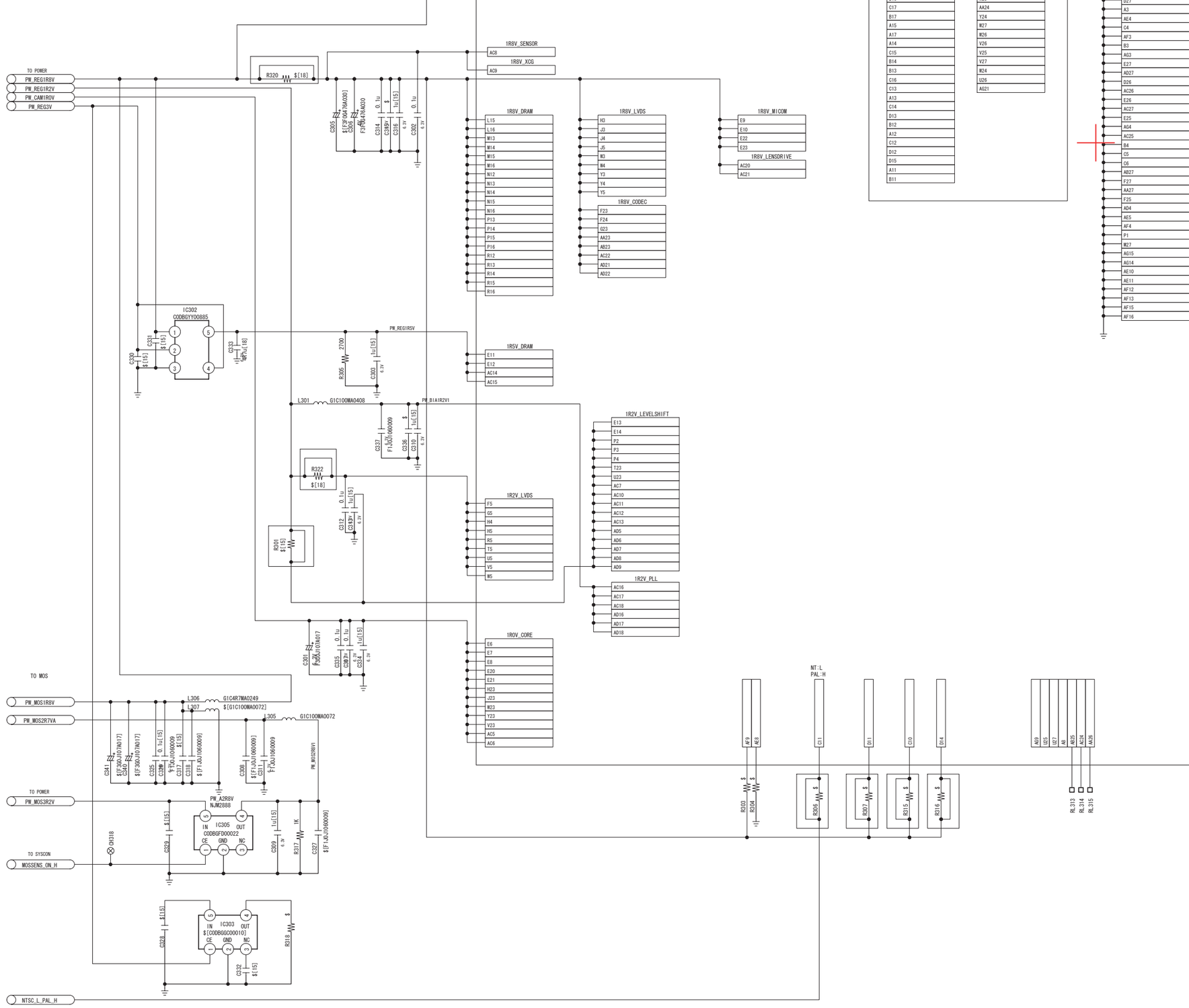
4/4

S4.2. Process Schematic Diagram



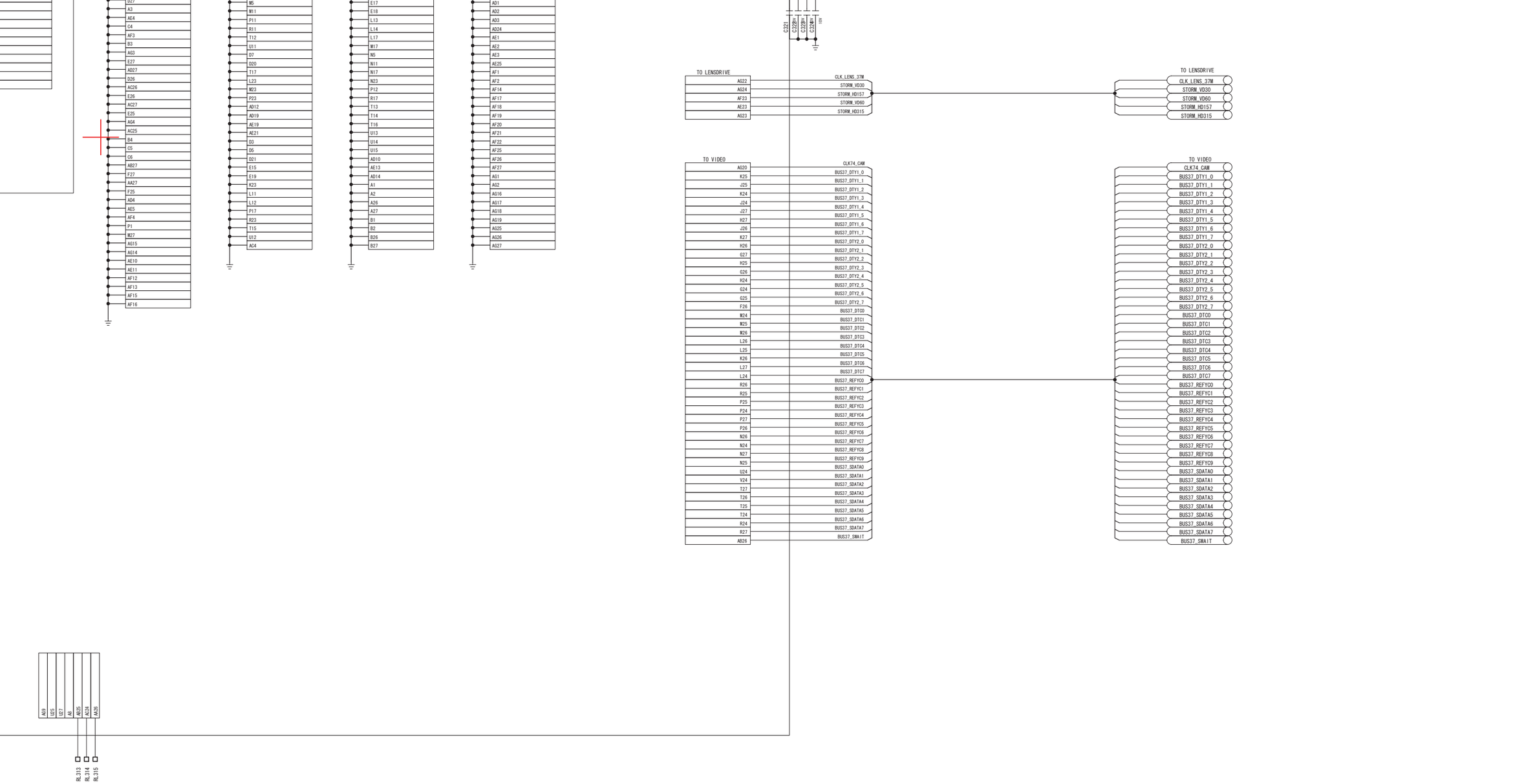
2/4
HDC-TM700/SD700/SD707
Process Section
(Main P.C.B. (2/9))
Schematic Diagram





HDC-TM700/SD700/SD707
Process Section
(Main P.C.B. (2/9))
Schematic Diagram

3/4

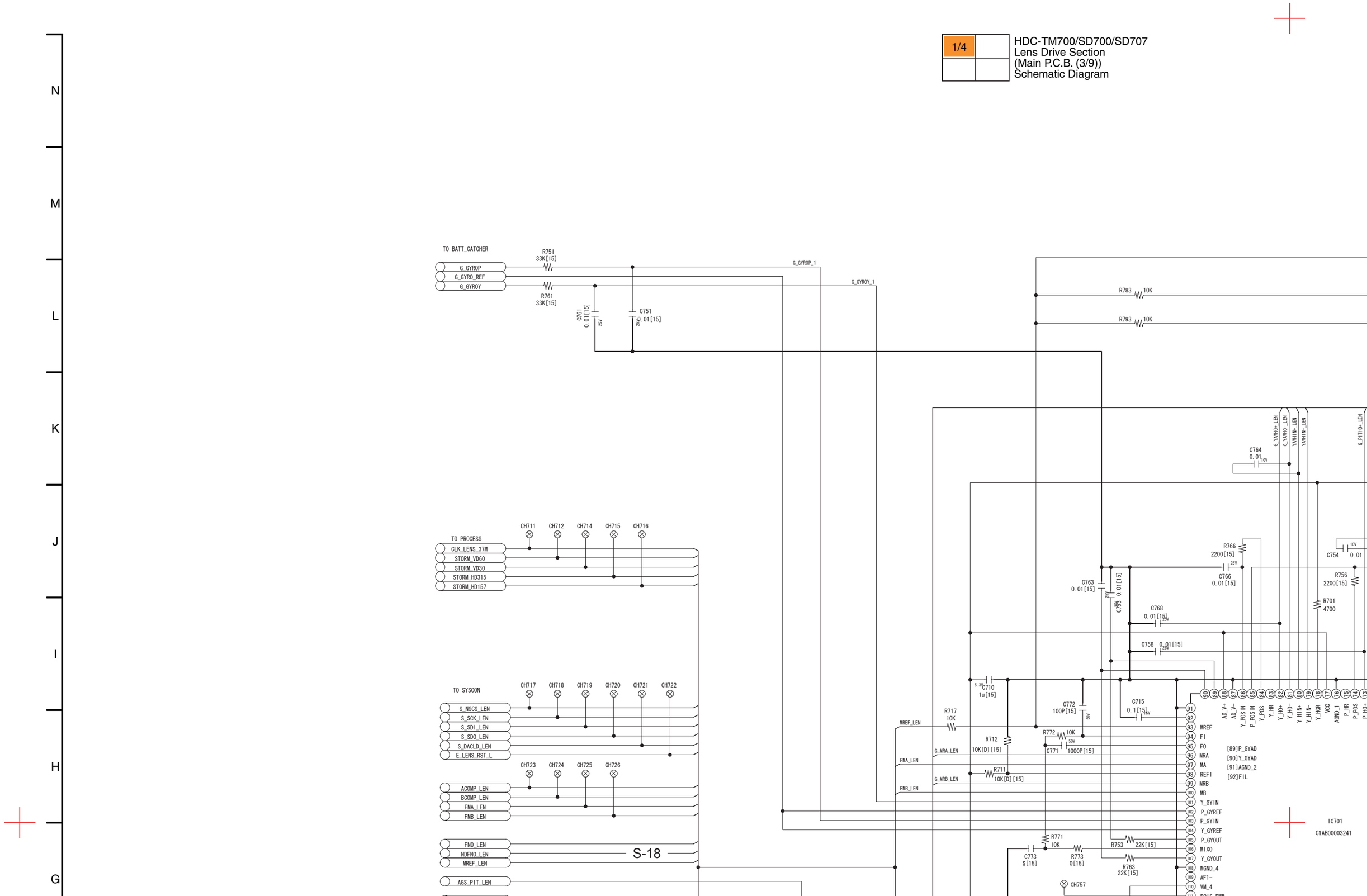


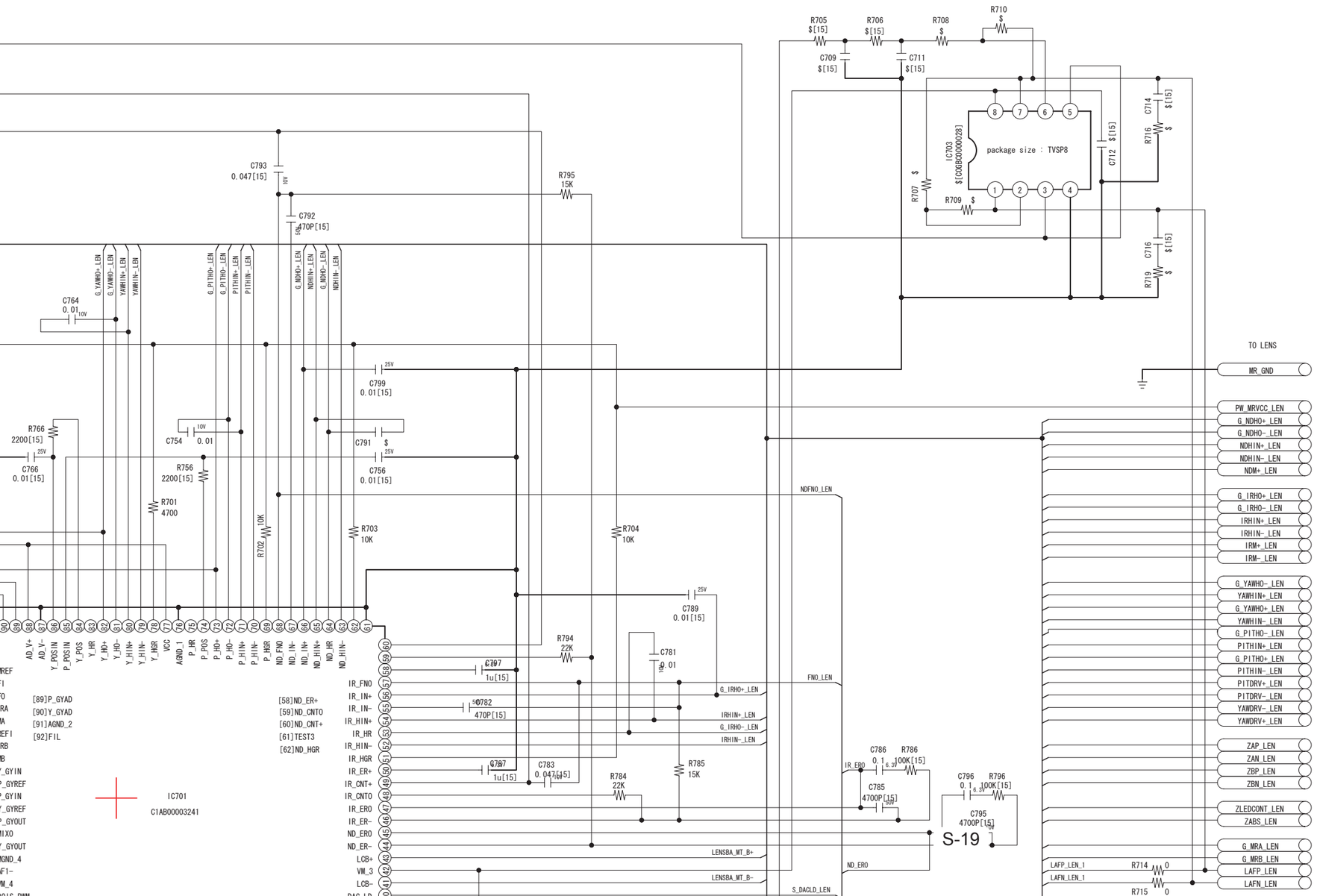
HDC-TM700/SD700/SD707
Process Section
(Main P.C.B. (2/9))
Schematic Diagram

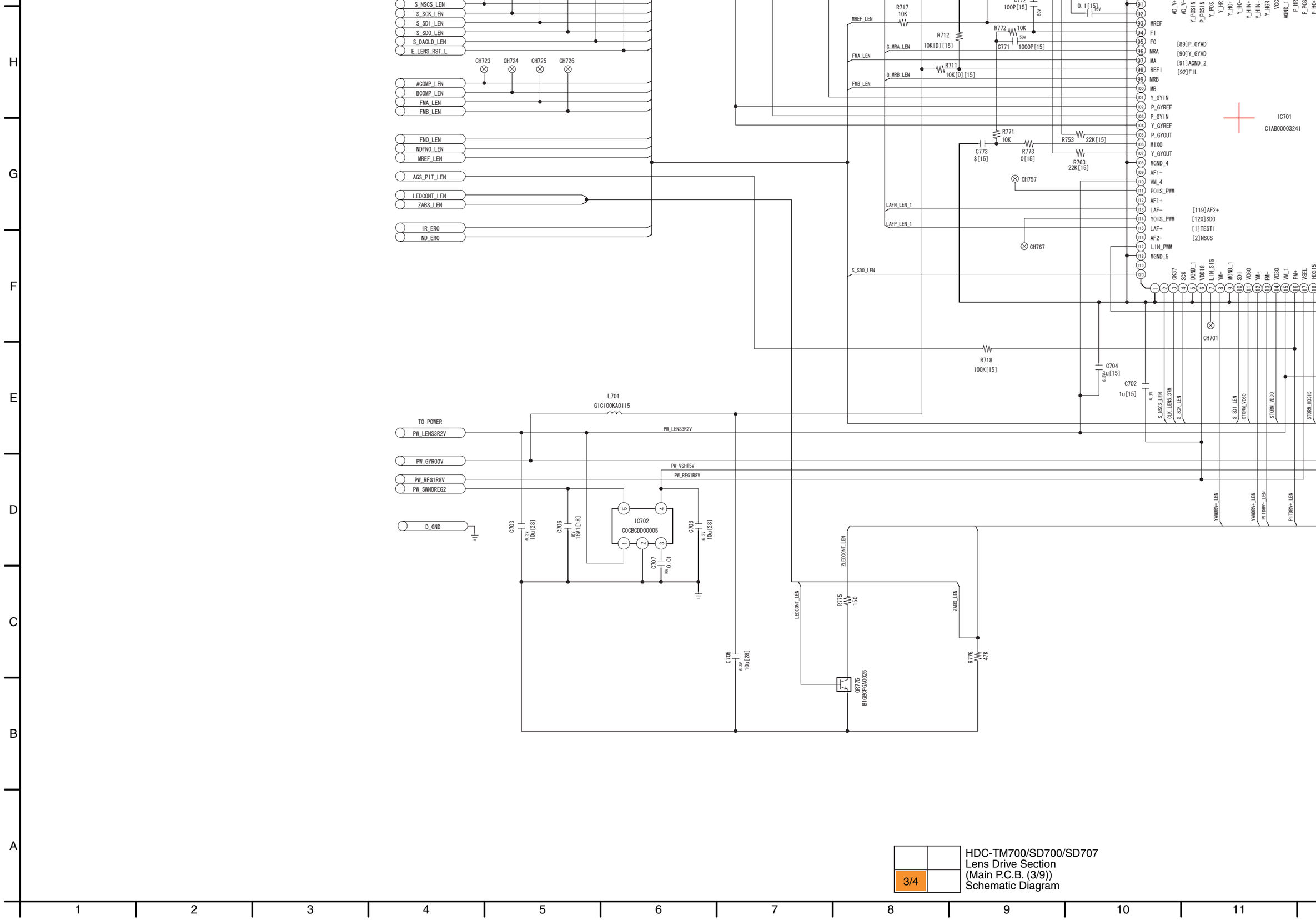
4/4

11 12 13 14 15 16 17 18 19 20 21

S4.3. Lens Drive Schematic Diagram

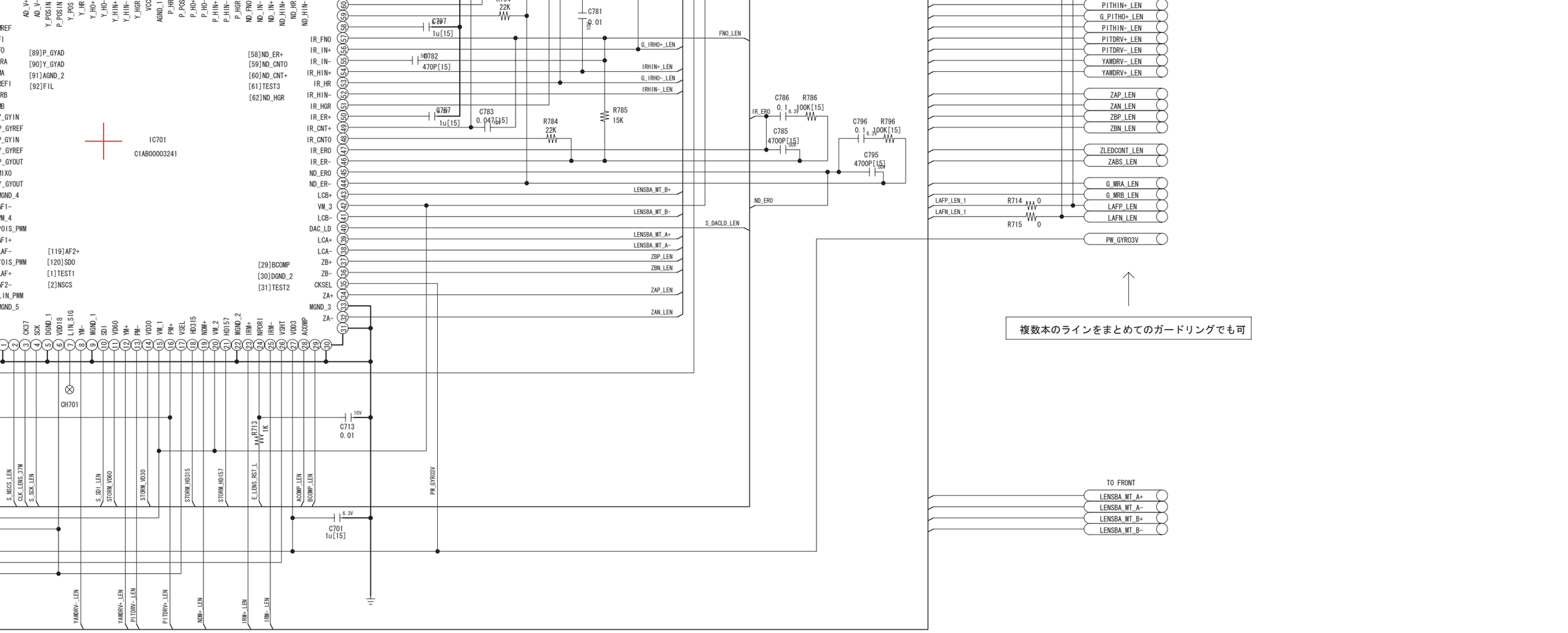



R705 $[15]
R706 $[15]
R708 $
R710 $
C709 $[15]
C711 $[15]
C714 $[15]
R716 $
C712 $[15]
IC703 $[C0GB00000028]
package size : TVSP8
R707 $
R709 $
C716 $[15]
R719 $
C793 0.047[15]
R795 15K
C792 470P[15]
C764 0.01
C799 0.01[15]
C754 0.01
C791 $
C756 0.01[15]
R766 2200[15]
C766 0.01[15]
R756 2200[15]
R701 4700
R702 10K
R703 10K
R704 10K
C789 0.01[15]
R794 22K
C797 1u[15]
C781 0.01
C782 470P[15]
C787 1u[15]
C783 0.047[15]
R784 22K
R785 15K
C786 0.1
R786 100K[15]
C785 4700P[15]
C796 0.1
R796 100K[15]
C795 4700P[15]
R714 0
R715 0
S-19
TO LENS
MR_GND
PW_MRVCC_LEN
G_NDHO+_LEN
G_NDHO-_LEN
NDHIN+_LEN
NDHIN-_LEN
NDM+_LEN
G_IRHO+_LEN
G_IRHO-_LEN
IRHIN+_LEN
IRHIN-_LEN
IRM+_LEN
IRM-_LEN
G_YAWHO-_LEN
YAWHIN+_LEN
G_YAWHO+_LEN
YAWHIN-_LEN
G_PITHO-_LEN
PITHIN+_LEN
G_PITHO+_LEN
PITHIN-_LEN
PITDRV+_LEN
PITDRV-_LEN
YAWDRV-_LEN
YAWDRV+_LEN
ZAP_LEN
ZAN_LEN
ZBP_LEN
ZBN_LEN
ZLEDCONT_LEN
ZABS_LEN
G_MRA_LEN
G_MRB_LEN
LAFP_LEN
LAFN_LEN
LAFP_LEN_1
LAFN_LEN_1
NDFNO_LEN
FNO_LEN
ND_ERO
LENSBA_MT_B+
LENSBA_MT_B-
S_DACLD_LEN
IC701
C1AB00003241
[89]P_GYAD
[90]Y_GYAD
[91]AGND_2
[92]FIL
[58]ND_ER+
[59]ND_CNTO
[60]ND_CNT+
[61]TEST3
[62]ND_HGR



HDC-TM700/SD700/SD707
Lens Drive Section
(Main P.C.B. (3/9))
Schematic Diagram

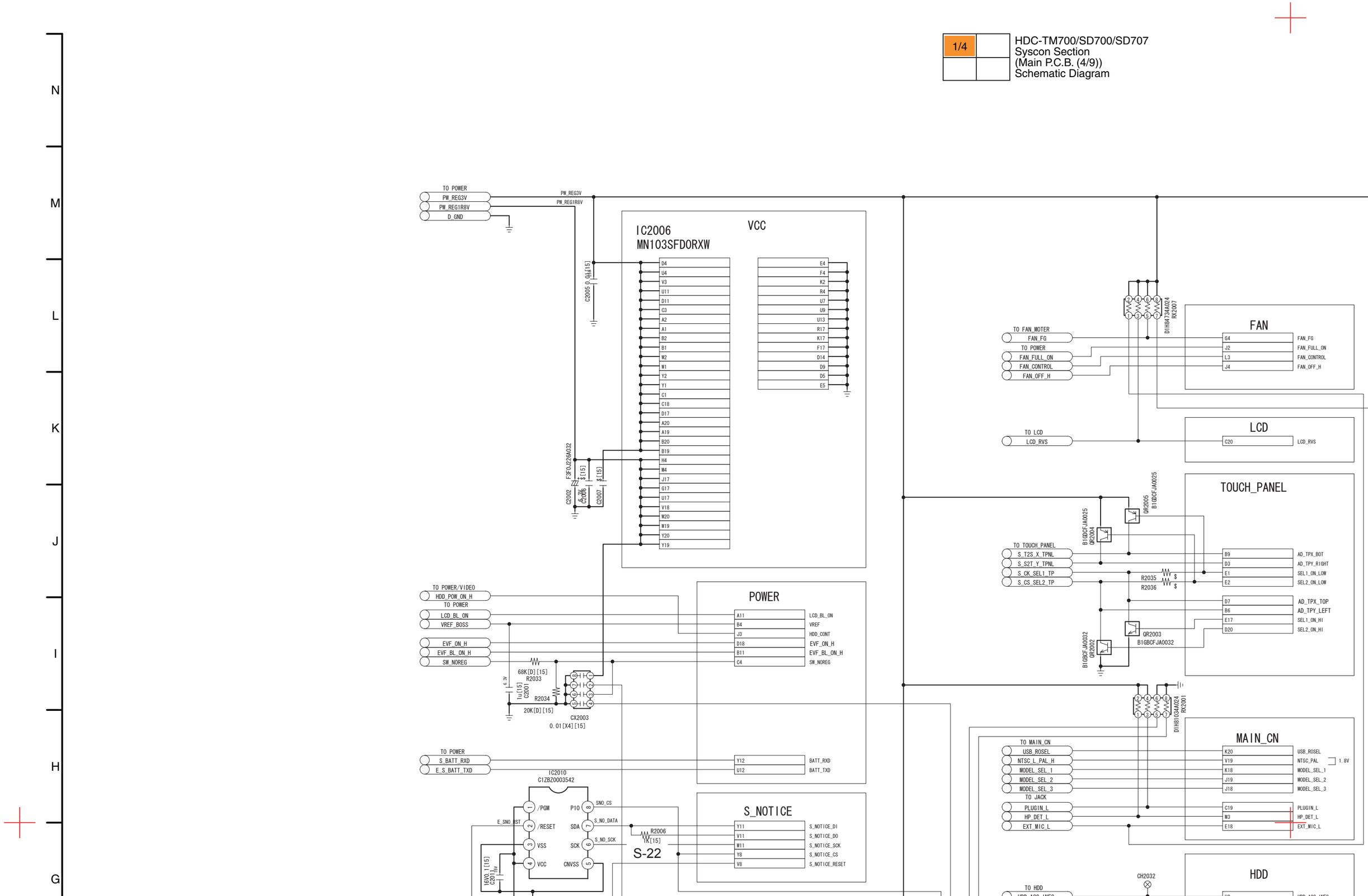
3/4

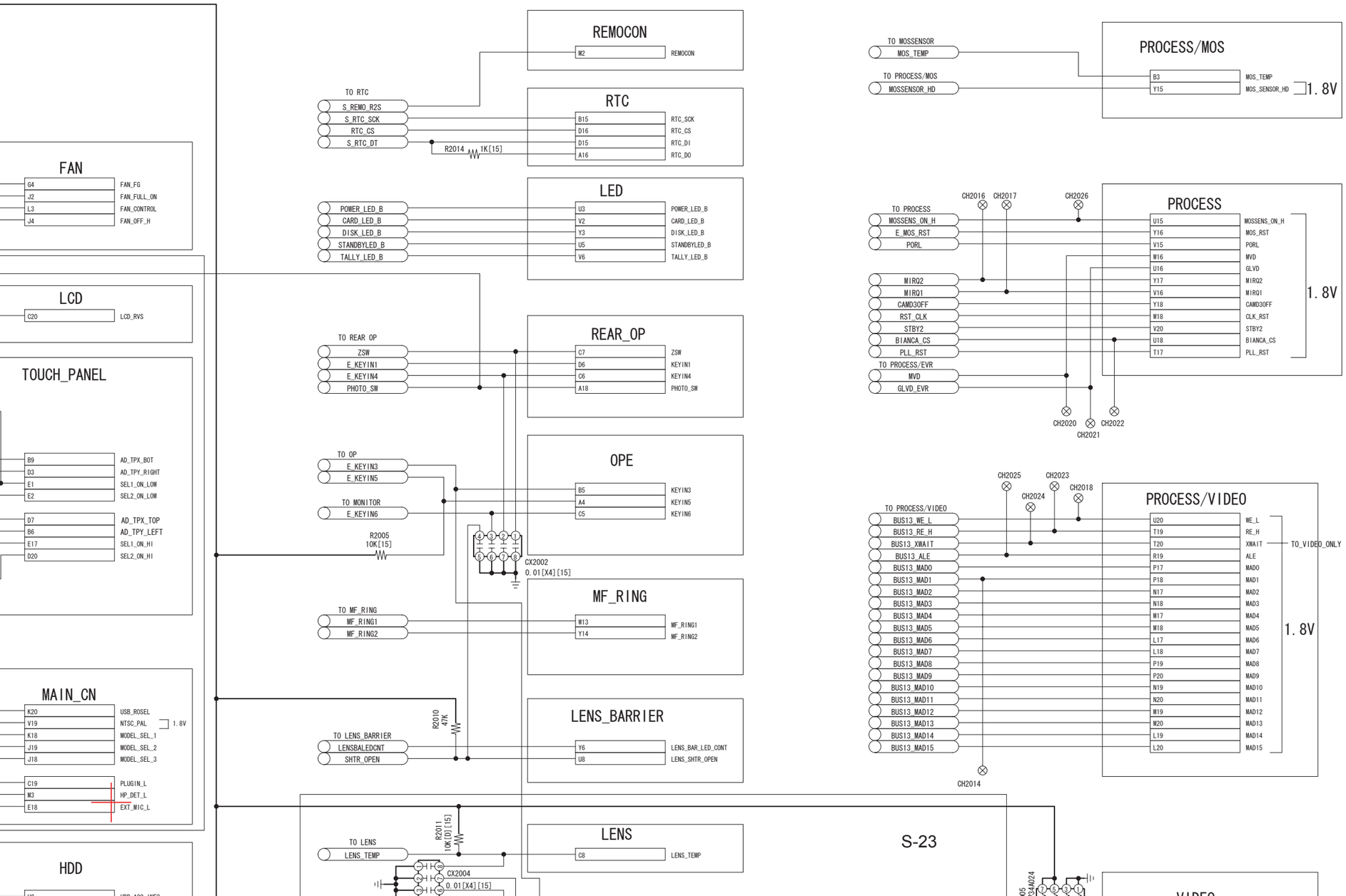


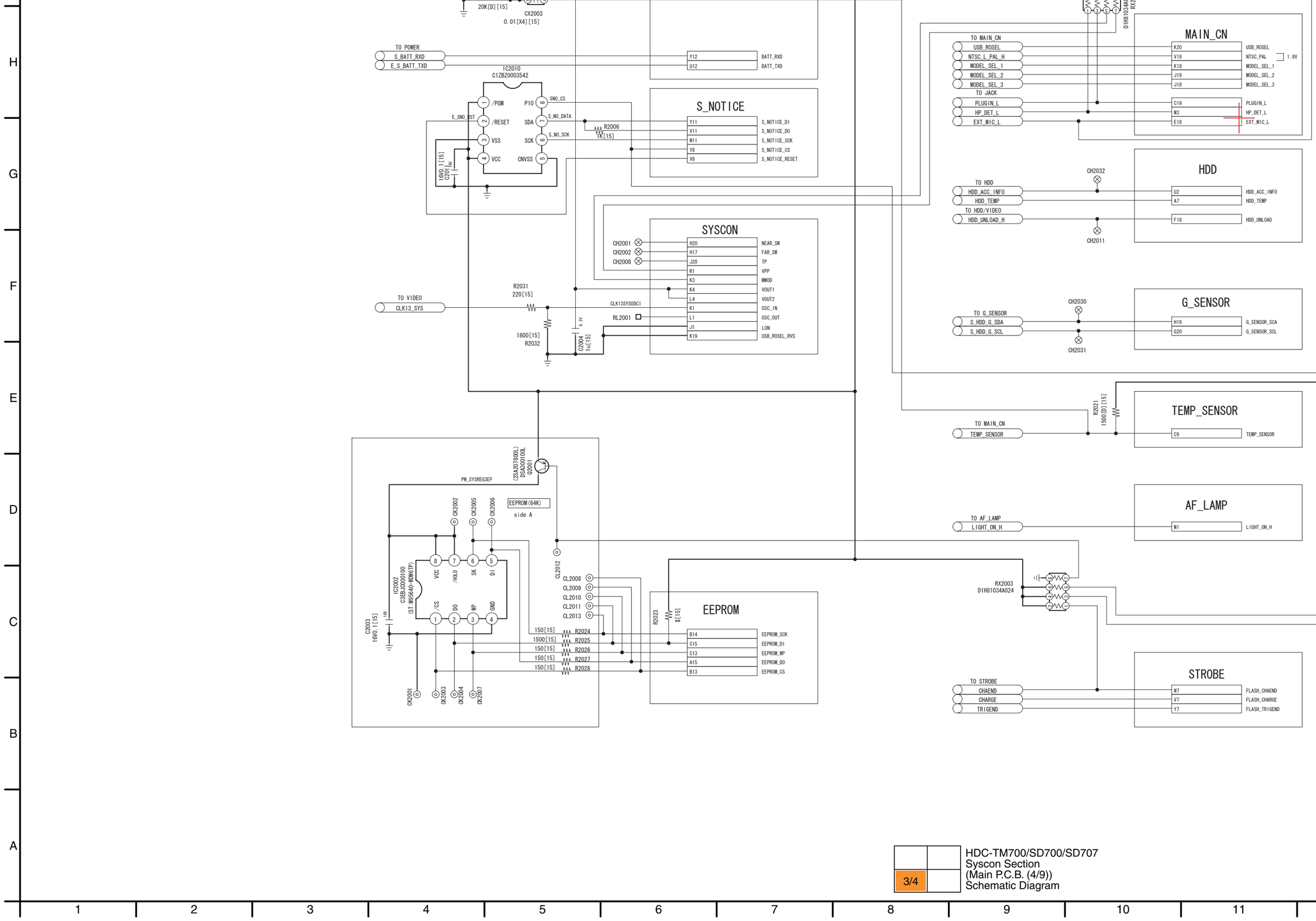
HDC-TM700/SD700/SD707
Lens Drive Section
(Main P.C.B. (3/9))
Schematic Diagram

4/4

S4.4. Syscon Schematic Diagram

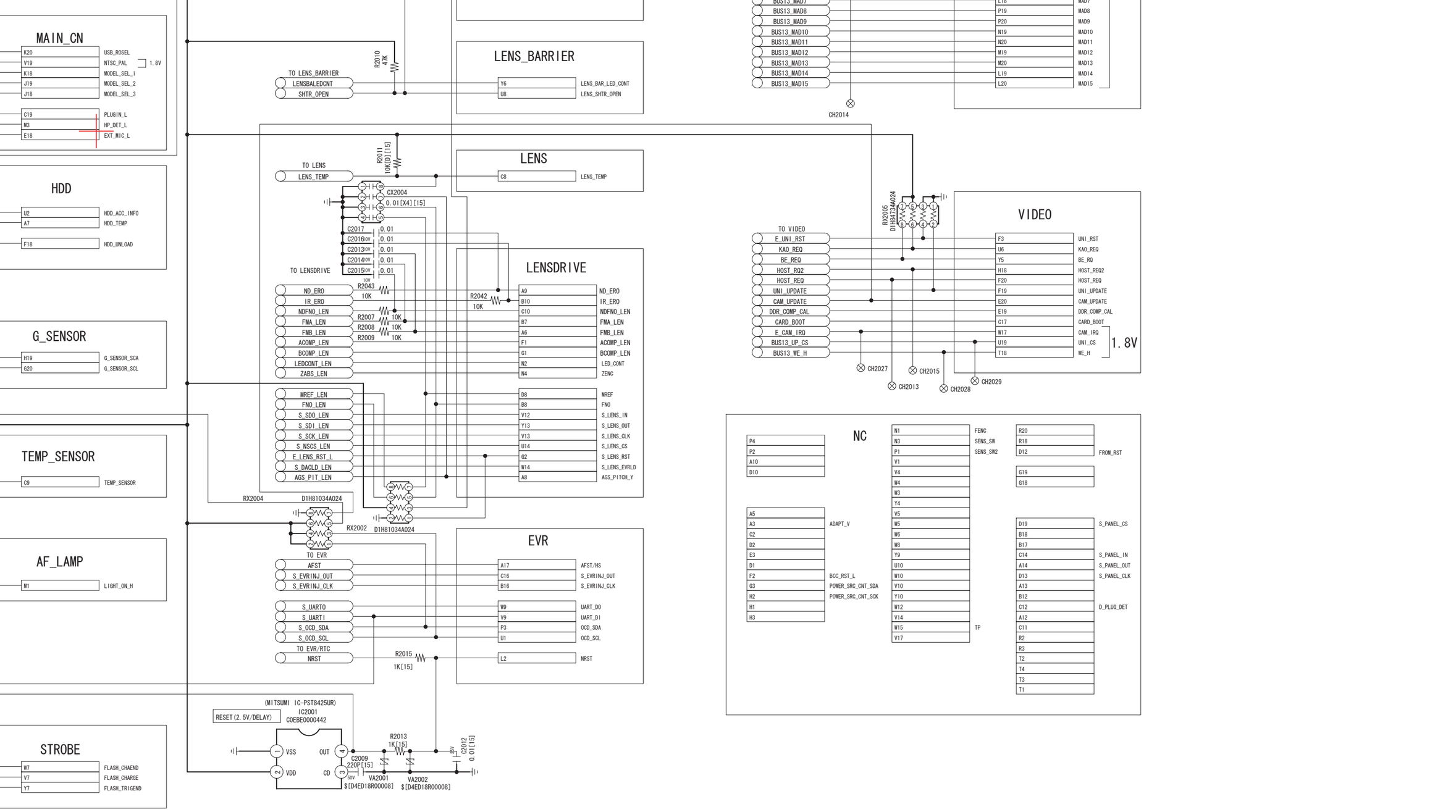



REMOCON
M2 REMOCON
TO RTC
S_REMO_R2S
S_RTC_SCK
RTC_CS
S_RTC_DT
R2014 1K[15]
RTC
B15 RTC_SCK
D16 RTC_CS
D15 RTC_DI
A16 RTC_DO
FAN
G4 FAN_FG
J2 FAN_FULL_ON
L3 FAN_CONTROL
J4 FAN_OFF_H
LED
POWER_LED_B
CARD_LED_B
DISK_LED_B
STANDBYLED_B
TALLY_LED_B
U3 POWER_LED_B
V2 CARD_LED_B
Y3 DISK_LED_B
U5 STANDBYLED_B
V6 TALLY_LED_B
LCD
C20 LCD_RVS
REAR_OP
TO REAR OP
ZSW
E_KEYIN1
E_KEYIN4
PHOTO_SW
C7 ZSW
D6 KEYIN1
C6 KEYIN4
A18 PHOTO_SW
TOUCH_PANEL
B9 AD_TPX_BOT
D3 AD_TPY_RIGHT
E1 SEL1_ON_LOW
E2 SEL2_ON_LOW
D7 AD_TPX_TOP
B6 AD_TPY_LEFT
E17 SEL1_ON_HI
D20 SEL2_ON_HI
OPE
TO OP
E_KEYIN3
E_KEYIN5
TO MONITOR
E_KEYIN6
B5 KEYIN3
A4 KEYIN5
C5 KEYIN6
R2005 10K[15]
CX2002 0.01[X4][15]
MF_RING
TO MF_RING
MF_RING1
MF_RING2
W13 MF_RING1
Y14 MF_RING2
MAIN_CN
K20 USB_ROSEL
V19 NTSC_PAL
K18 MODEL_SEL_1
J19 MODEL_SEL_2
J18 MODEL_SEL_3
1.8V
C19 PLUGIN_L
M3 HP_DET_L
E18 EXT_MIC_L
LENS_BARRIER
R2010 47K
TO LENS_BARRIER
LENSBALEDCNT
SHTR_OPEN
Y6 LENS_BAR_LED_CONT
U8 LENS_SHTR_OPEN
HDD
LENS
R2011 10K[D][15]
TO LENS
LENS_TEMP
C8 LENS_TEMP
CX2004 0.01[X4][15]
S-23
TO MOSSENSOR
MOS_TEMP
TO PROCESS/MOS
MOSSENSOR_HD
PROCESS/MOS
B3 MOS_TEMP
Y15 MOS_SENSOR_HD
1.8V
CH2016
CH2017
CH2026
TO PROCESS
MOSSENS_ON_H
E_MOS_RST
PORL
MIRQ2
MIRQ1
CAMD30FF
RST_CLK
STBY2
BIANCA_CS
PLL_RST
TO PROCESS/EVR
MVD
GLVD_EVR
PROCESS
U15 MOSSENS_ON_H
Y16 MOS_RST
V15 PORL
W16 MVD
U16 GLVD
Y17 MIRQ2
V16 MIRQ1
Y18 CAMD30FF
W18 CLK_RST
V20 STBY2
U18 BIANCA_CS
T17 PLL_RST
1.8V
CH2020
CH2021
CH2022
CH2025
CH2023
CH2018
CH2024
TO PROCESS/VIDEO
BUS13_WE_L
BUS13_RE_H
BUS13_XWAIT
BUS13_ALE
BUS13_MAD0
BUS13_MAD1
BUS13_MAD2
BUS13_MAD3
BUS13_MAD4
BUS13_MAD5
BUS13_MAD6
BUS13_MAD7
BUS13_MAD8
BUS13_MAD9
BUS13_MAD10
BUS13_MAD11
BUS13_MAD12
BUS13_MAD13
BUS13_MAD14
BUS13_MAD15
PROCESS/VIDEO
U20 WE_L
T19 RE_H
T20 XWAIT
R19 ALE
P17 MAD0
P18 MAD1
N17 MAD2
N18 MAD3
M17 MAD4
M18 MAD5
L17 MAD6
L18 MAD7
P19 MAD8
P20 MAD9
N19 MAD10
N20 MAD11
M19 MAD12
M20 MAD13
L19 MAD14
L20 MAD15
TO_VIDEO_ONLY
1.8V
CH2014



HDC-TM700/SD700/SD707
Syscon Section
(Main P.C.B. (4/9))
Schematic Diagram

3/4

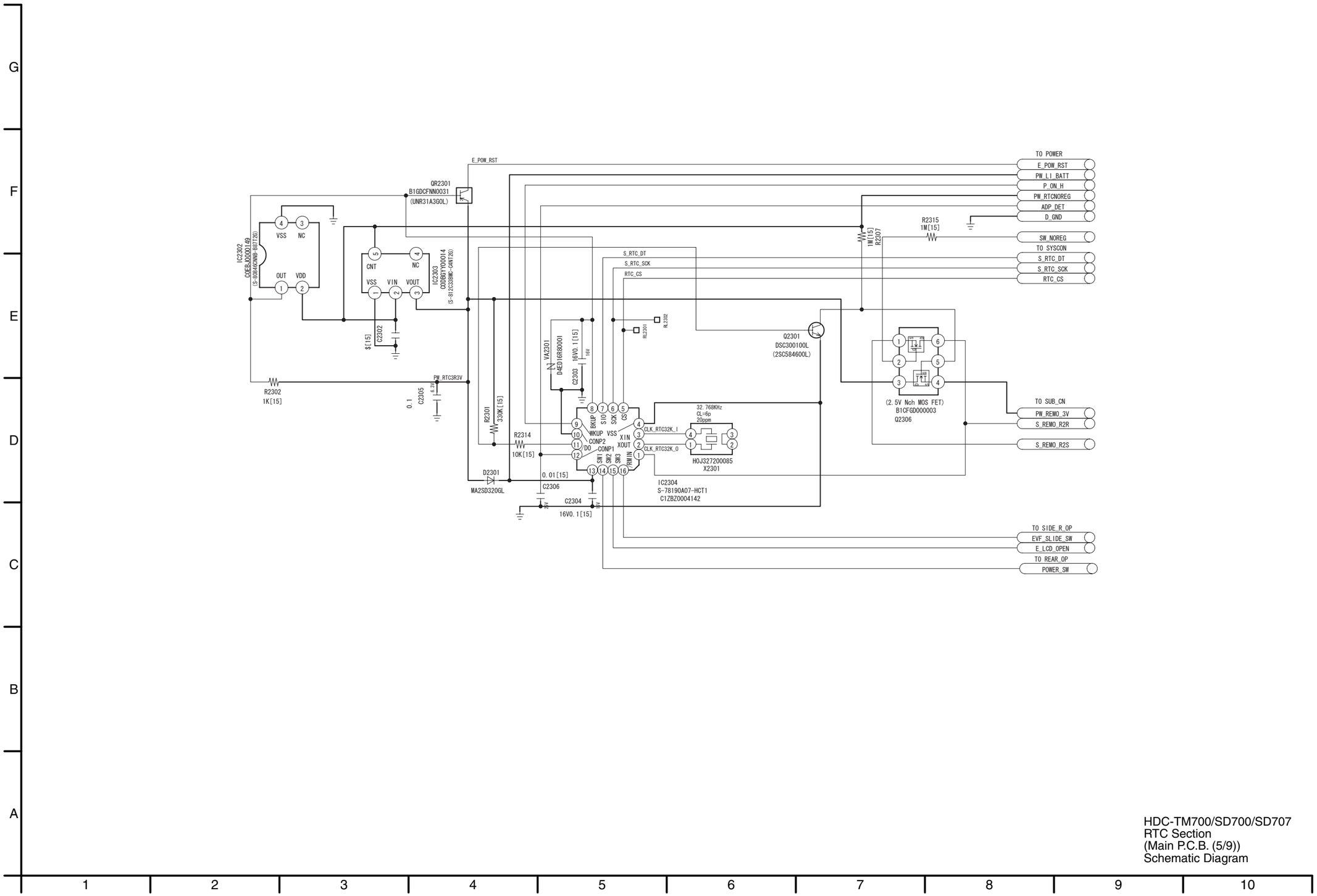


HDC-TM700/SD700/SD707
Syscon Section
(Main P.C.B. (4/9))
Schematic Diagram

4/4

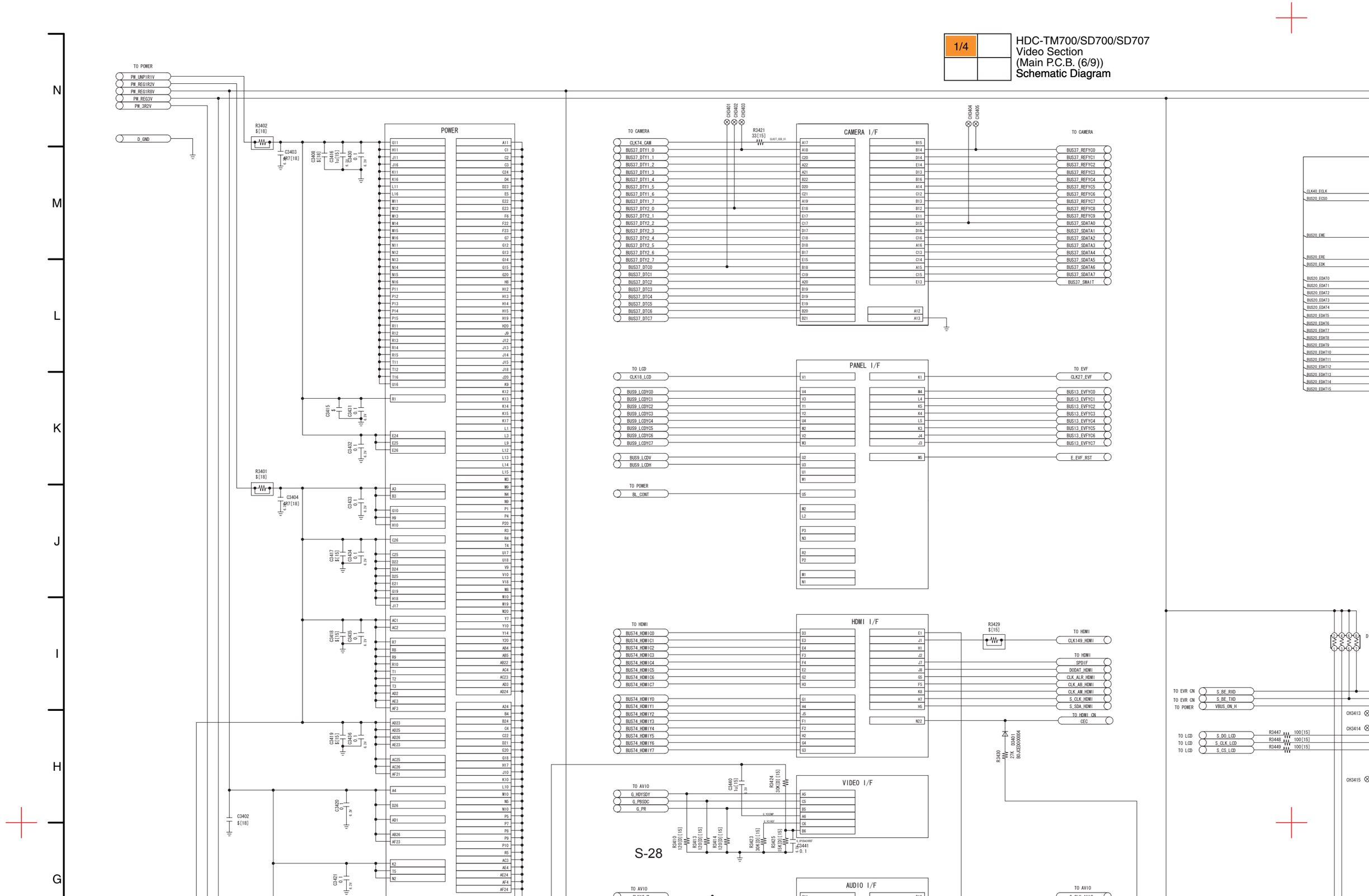
11 12 13 14 15 16 17 18 19 20 21

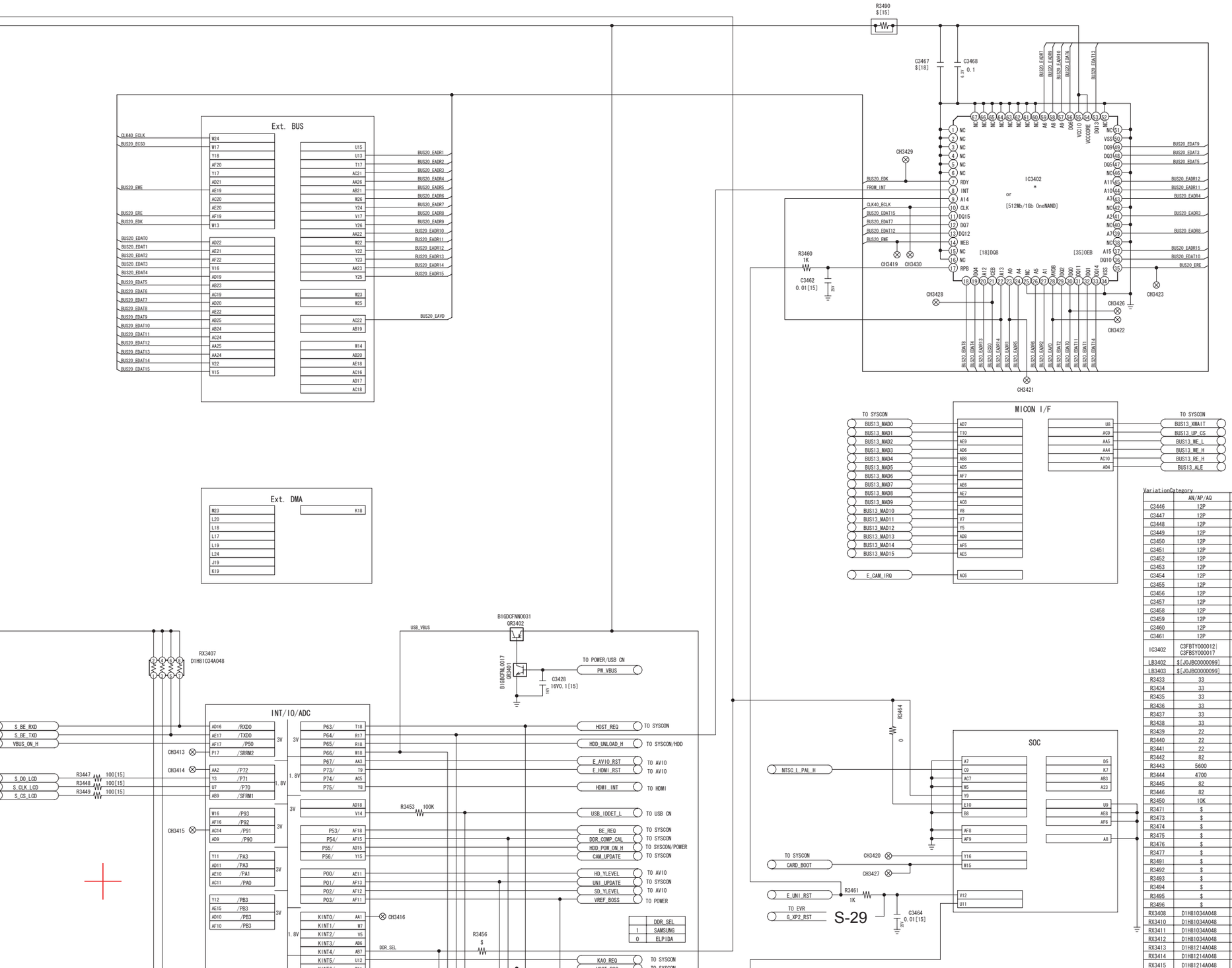
S4.5. RTC Schematic Diagram



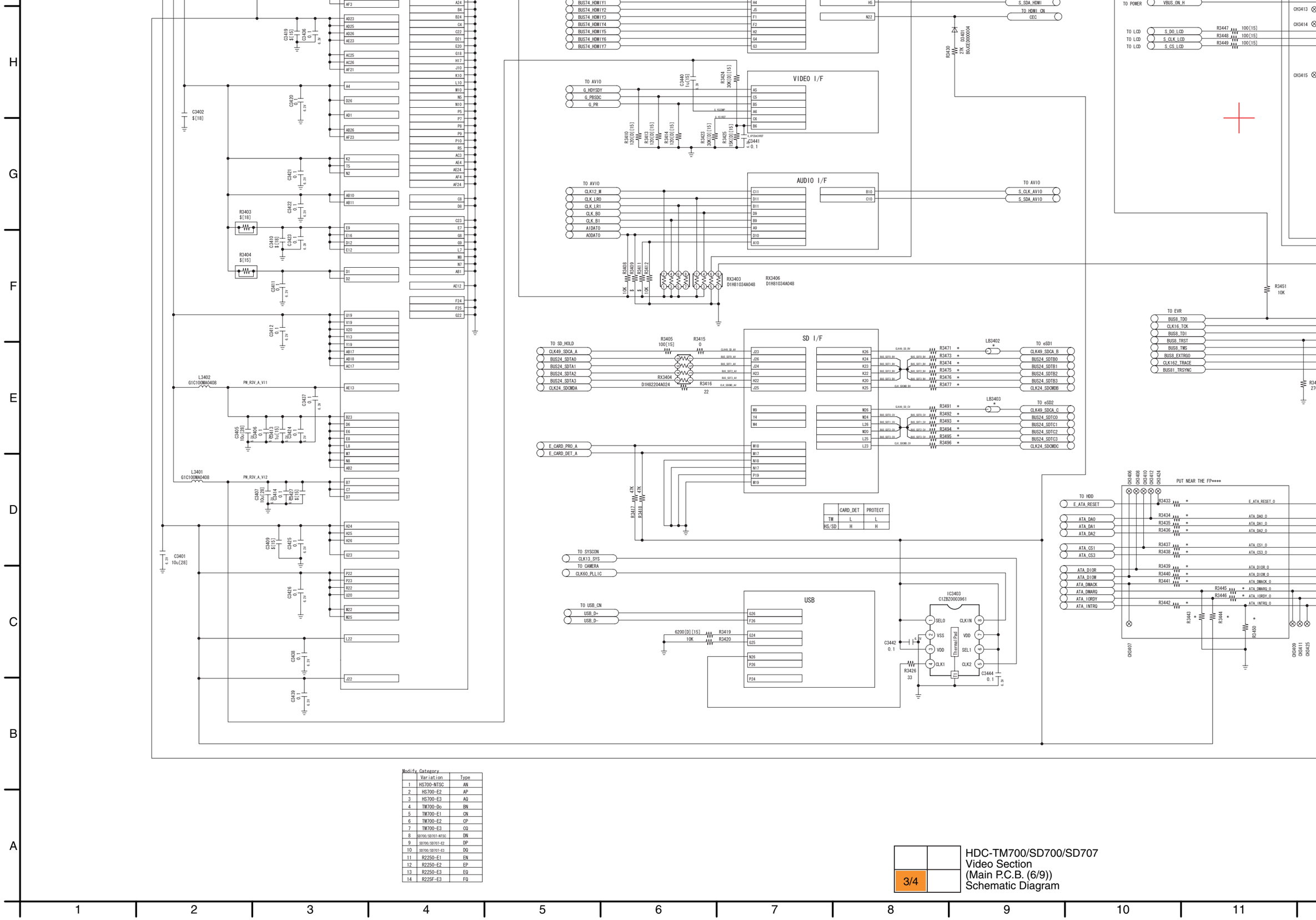
HDC-TM700/SD700/SD707
RTC Section
(Main P.C.B. (5/9))
Schematic Diagram

S4.6. Video Schematic Diagram





VariationCategory	AN/AP/AQ	BN	CN/CP/CQ	DN/DP/DQ	EN/EP/EQ	FQ
C3446	12P	$	$	$	$	$
C3447	12P	$	$	$	$	$
C3448	12P	$	$	$	$	$
C3449	12P	$	$	$	$	$
C3450	12P	$	$	$	$	$
C3451	12P	$	$	$	$	$
C3452	12P	$	$	$	$	$
C3453	12P	$	$	$	$	$
C3454	12P	$	$	$	$	$
C3455	12P	$	$	$	$	$
C3456	12P	$	$	$	$	$
C3457	12P	$	$	$	$	$
C3458	12P	$	$	$	$	$
C3459	12P	$	$	$	$	$
C3460	12P	$	$	$	$	$
C3461	12P	$	$	$	$	$
IC3402	C3FBTY000012|C3FBSY000017	C3FBSY000017|C3FBTY000012	C3FBSY000017|C3FBTY000012	C3FBTY000012|C3FBSY000017	C3FBSY000017|C3FBTY000012	C3FBSY000017|C3FBTY000012
LB3402	$[JOJBC0000099]	JOJBC0000099	JOJBC0000099	$[JOJBC0000099]	$[JOJBC0000099]	JOJBC0000099
LB3403	$[JOJBC0000099]	JOJBC0000099	$[JOJBC0000099]	$[JOJBC0000099]	$[JOJBC0000099]	JOJBC0000099
R3433	33	$	$	$	$	$
R3434	33	$	$	$	$	$
R3435	33	$	$	$	$	$
R3436	33	$	$	$	$	$
R3437	33	$	$	$	$	$
R3438	33	$	$	$	$	$
R3439	22	$	$	$	$	$
R3440	22	$	$	$	$	$
R3441	22	$	$	$	$	$
R3442	82	$	$	$	$	$
R3443	5600	$	$	$	$	$
R3444	4700	$	$	$	$	$
R3445	82	$	$	$	$	$
R3446	82	$	$	$	$	$
R3450	10K	$	$	$	$	$
R3471	$	100	100	$	$	100
R3473	$	22	22	$	$	22
R3474	$	22	22	$	$	22
R3475	$	22	22	$	$	22
R3476	$	22	22	$	$	22
R3477	$	22	22	$	$	22
R3491	$	100	$	$	$	100
R3492	$	22	$	$	$	22
R3493	$	22	$	$	$	22
R3494	$	22	$	$	$	22
R3495	$	22	$	$	$	22
R3496	$	22	$	$	$	22
RX3408	D1H81034A048	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]
RX3410	D1H81034A048	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]
RX3411	D1H81034A048	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]
RX3412	D1H81034A048	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]
RX3413	D1H81214A048	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]
RX3414	D1H81214A048	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]
RX3415	D1H81214A048	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]



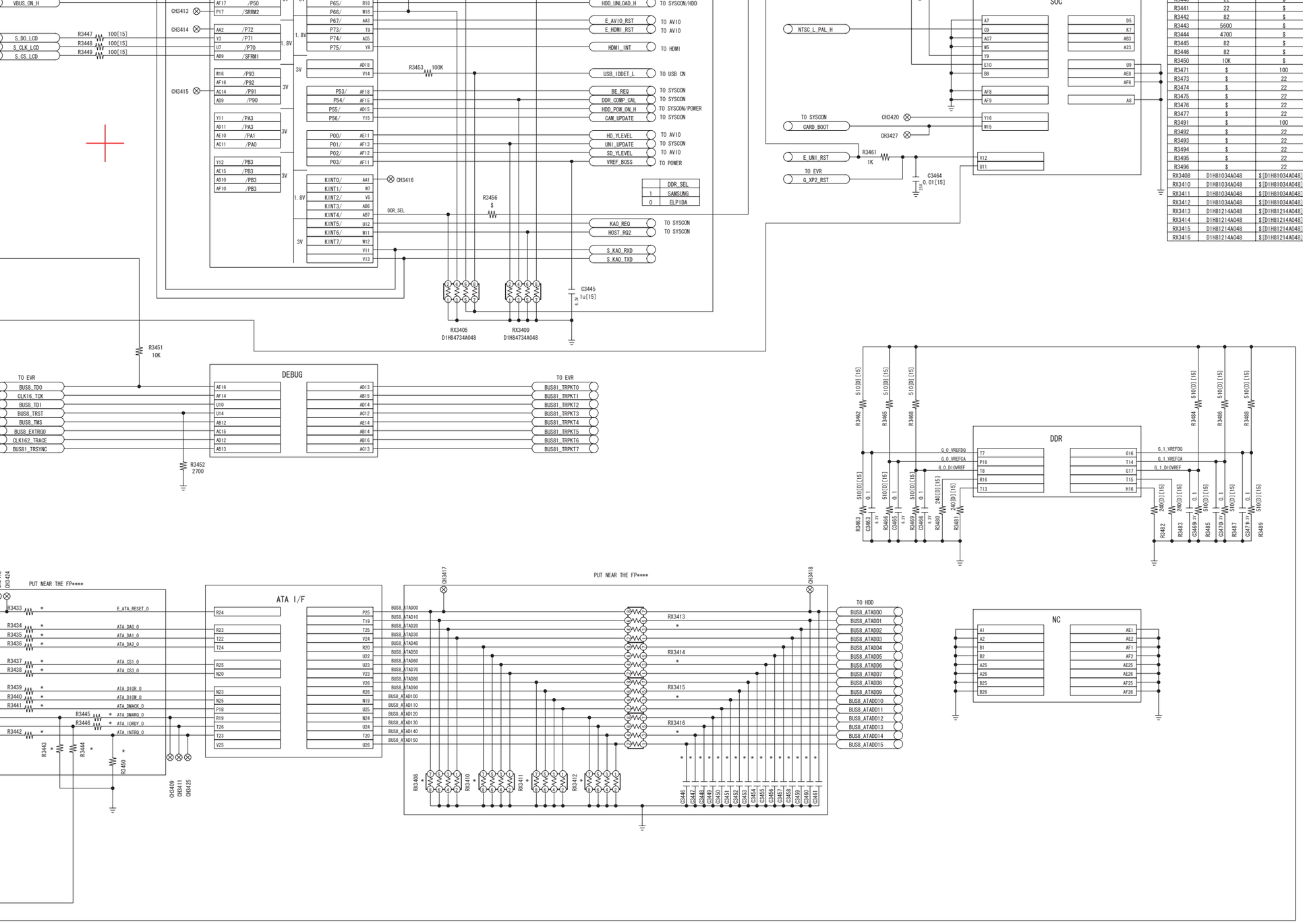
	CARD_DET	PROTECT
TM	L	L
HS/SD	H	H

Modify Category

	Variation	Type
1	HS700-NTSC	AN
2	HS700-E2	AP
3	HS700-E3	AQ
4	TM700-Do	BN
5	TM700-E1	CN
6	TM700-E2	CP
7	TM700-E3	CQ
8	SD700/SD707-NTSC	DN
9	SD700/SD707-E2	DP
10	SD700/SD707-E3	DQ
11	R2250-E1	EN
12	R2250-E2	EP
13	R2250-E3	EQ
14	R225F-E3	FQ

3/4

HDC-TM700/SD700/SD707
Video Section
(Main P.C.B. (6/9))
Schematic Diagram

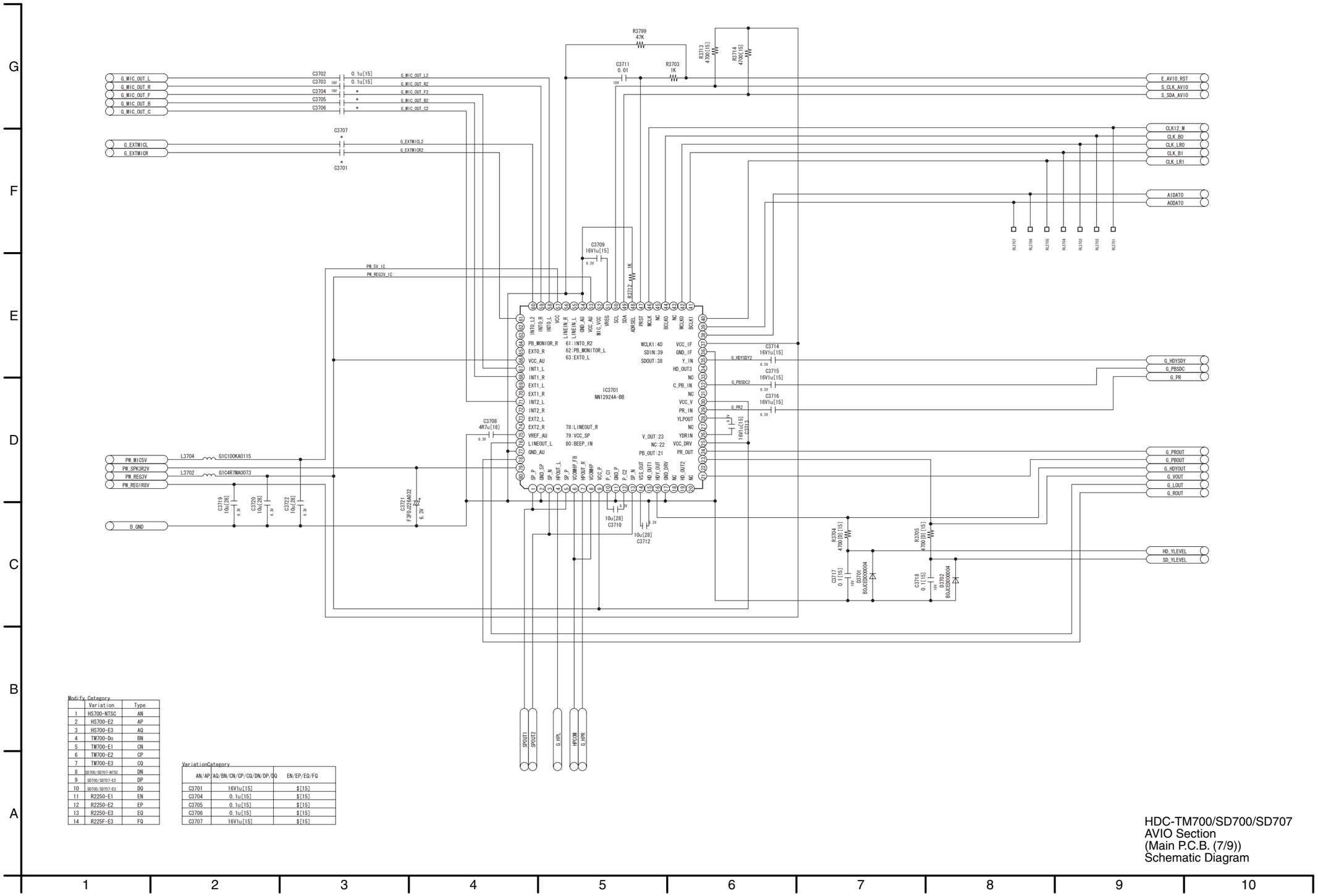


R3440	22	$	$	$	$	$
R3441	22	$	$	$	$	$
R3442	82	$	$	$	$	$
R3443	5600	$	$	$	$	$
R3444	4700	$	$	$	$	$
R3445	82	$	$	$	$	$
R3446	82	$	$	$	$	$
R3450	10K	$	$	$	$	$
R3471	$	100	100	$	$	100
R3473	$	22	22	$	$	22
R3474	$	22	22	$	$	22
R3475	$	22	22	$	$	22
R3476	$	22	22	$	$	22
R3477	$	22	22	$	$	22
R3491	$	100	$	$	$	100
R3492	$	22	$	$	$	22
R3493	$	22	$	$	$	22
R3494	$	22	$	$	$	22
R3495	$	22	$	$	$	22
R3496	$	22	$	$	$	22
RX3408	D1H81034A048	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]
RX3410	D1H81034A048	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]
RX3411	D1H81034A048	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]
RX3412	D1H81034A048	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]	$[D1H81034A048]
RX3413	D1H81214A048	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]
RX3414	D1H81214A048	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]
RX3415	D1H81214A048	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]
RX3416	D1H81214A048	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]	$[D1H81214A048]

HDC-TM700/SD700/SD707
Video Section
(Main P.C.B. (6/9))
Schematic Diagram

4/4

S4.7. AVIO Schematic Diagram



Modify Category

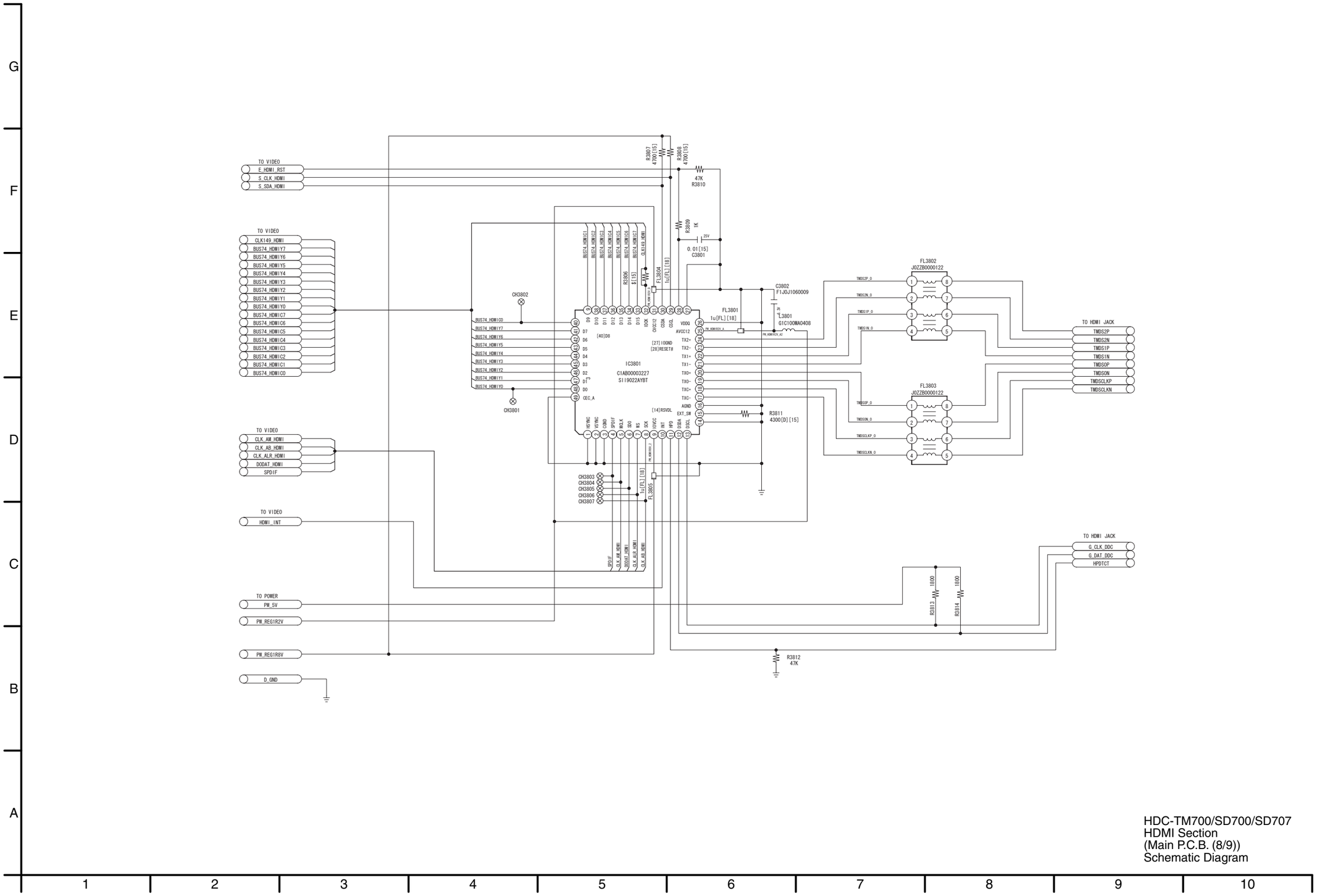
	Variation	Type
1	HS700-NTSC	AN
2	HS700-E2	AP
3	HS700-E3	AQ
4	TM700-Do	BN
5	TM700-E1	CN
6	TM700-E2	CP
7	TM700-E3	CQ
8	SD700/SD707-NTSC	DN
9	SD700/SD707-E2	DP
10	SD700/SD707-E3	DQ
11	R2250-E1	EN
12	R2250-E2	EP
13	R2250-E3	EQ
14	R225F-E3	FQ

VariationCategory

AN/AP/AQ/BN/CN/CP/CQ/DN/DP/DQ		EN/EP/EQ/FQ
C3701	16V1u[15]	$[15]
C3704	0.1u[15]	$[15]
C3705	0.1u[15]	$[15]
C3706	0.1u[15]	$[15]
C3707	16V1u[15]	$[15]

HDC-TM700/SD700/SD707
AVIO Section
(Main P.C.B. (7/9))
Schematic Diagram

S4.8. HDMI Schematic Diagram

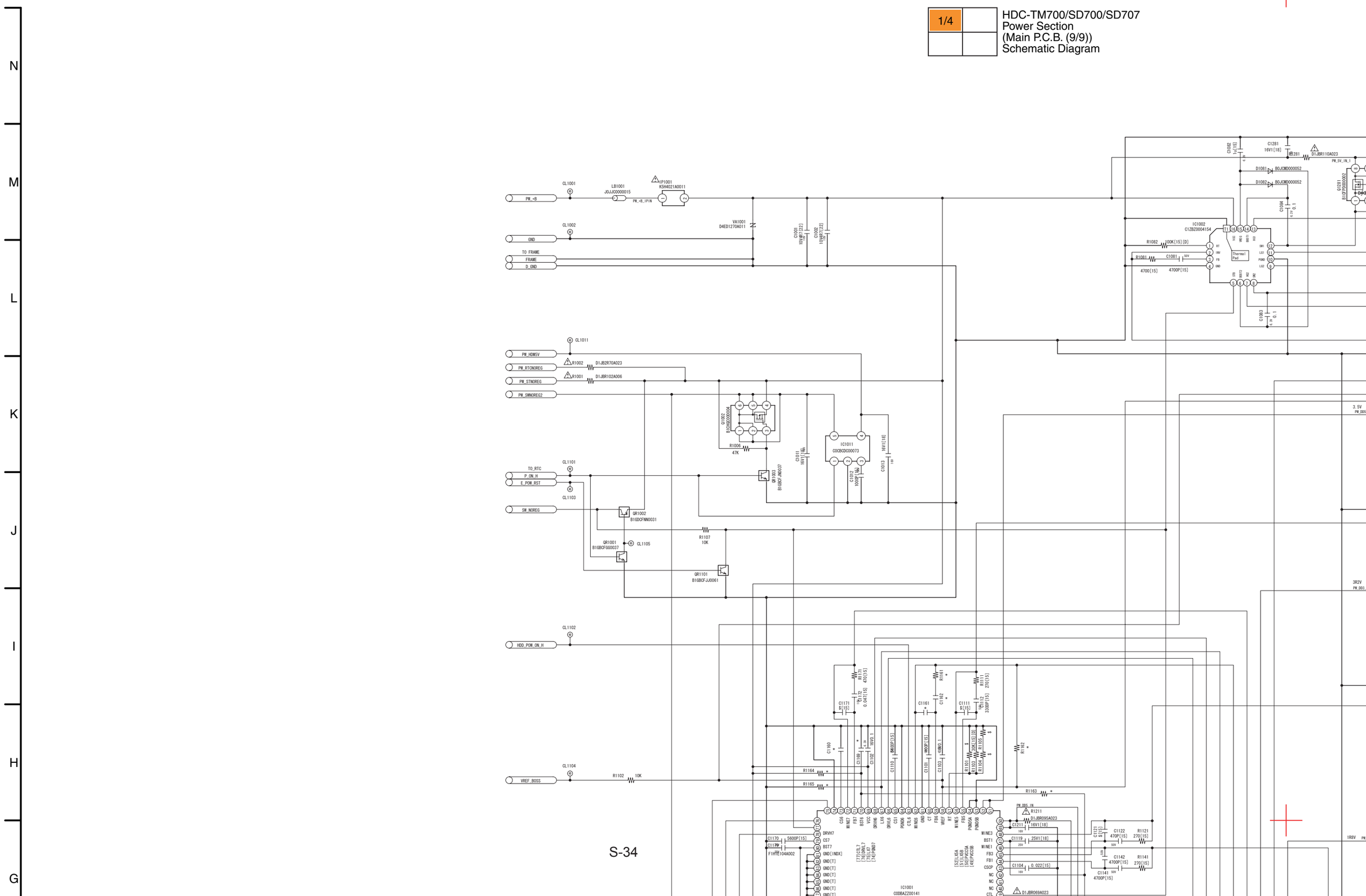


HDC-TM700/SD700/SD707
HDMI Section
(Main P.C.B. (8/9))
Schematic Diagram

S4.9. Power Schematic Diagram

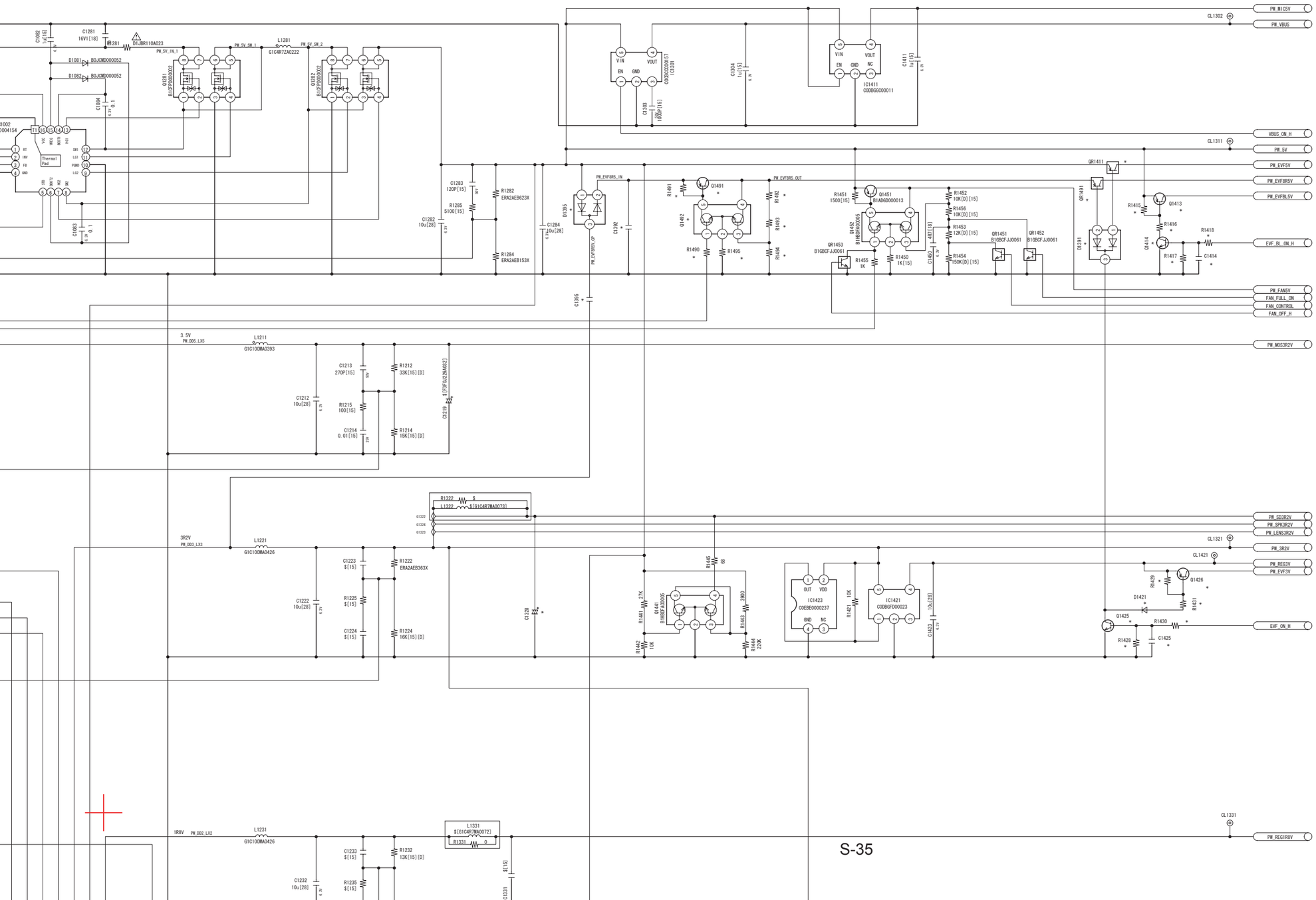
1/4	

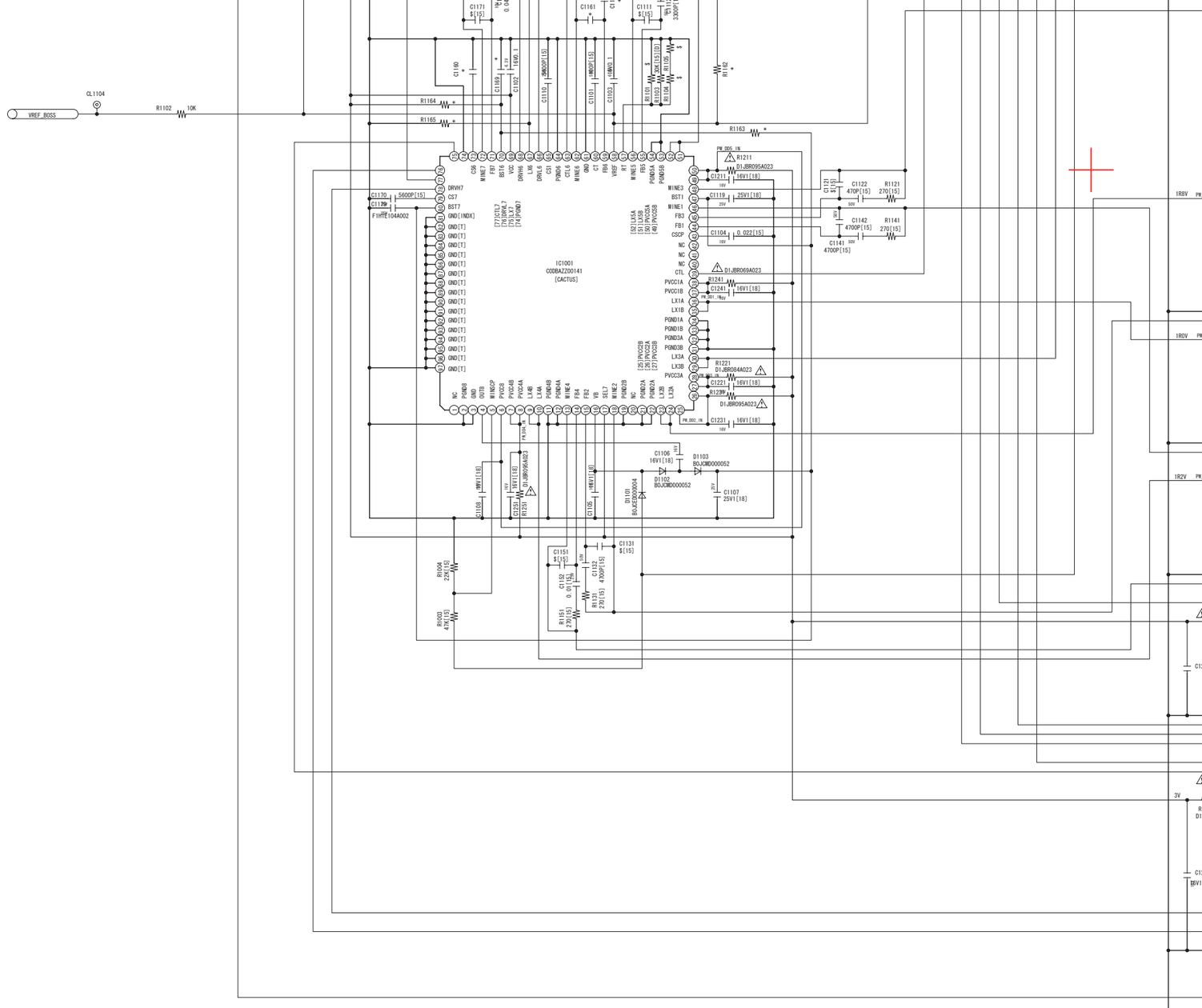
HDC-TM700/SD700/SD707
Power Section
(Main P.C.B. (9/9))
Schematic Diagram



2/4

HDC-TM700/SD700/SD707
Power Section
(Main P.C.B. (9/9))
Schematic Diagram





Variation Category

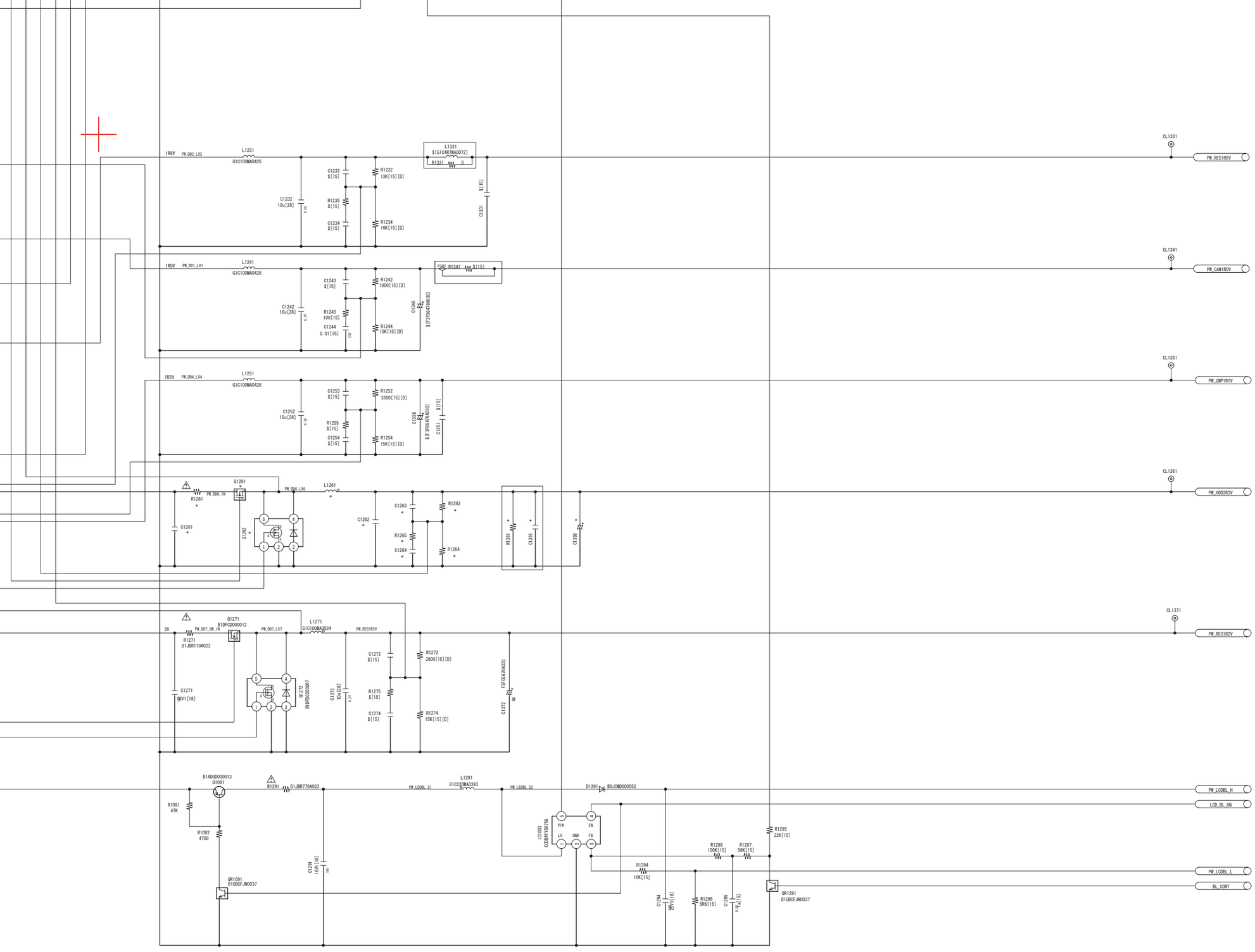
	AN/AP/AQ	BN/CN/CP/CQ/DN/DP/DQ	EN/EP/EQ/FQ
C1160	0.015[15]	$[15]	$[15]
C1161	$[15]	$[15]	$[15]
C1162	3300P[15]	$[15]	$[15]
C1169	F1H1E104A002	$[F1H1E104A002]	$[F1H1E104A002]
C1261	16V1[18]	$[18]	$[18]
C1262	10u[28]	$[28]	$[28]
C1263	3300P[15]	$[15]	$[15]
C1264	0.022[15]	$[15]	$[15]
C1328	F3F0J476A032	F3F0J476A032	F3F0J476A032
C1361	$[15]	$[15]	$[15]
C1366	$[F3F06476A030]	$[F3F06476A030]	$[F3F06476A030]
C1392	25V1[18]	25V1[18]	$[18]
C1395	16V1[18]	16V1[18]	$[18]
C1414	16V1[18]	16V1[18]	$[18]
C1425	4R7[18]	4R7[18]	$[18]
D1391	B0ADCJ000097	B0ADCJ000097	$[B0ADCJ000097]
D1395	B0JDCE000013	B0JDCE000013	$[B0JDCE000013]
D1421	B0ACDJ000007	B0ACDJ000007	$[B0ACDJ000007]
L1261	G1C100MA0393	$[G1C100MA0393]	$[G1C100MA0393]
Q1261	B1DFCD000012	$[B1DFCD000012]	$[B1DFCD000012]
Q1262	B1DFBC000007	$[B1DFBC000007]	$[B1DFBC000007]
Q1413	B1ADGD000013	B1ADGD000013	$[B1ADGD000013]
Q1414	DSC300100L	DSC300100L	$[DSC300100L]
Q1425	DSC300100L	DSC300100L	$[DSC300100L]
Q1426	B1ADGD000013	B1ADGD000013	$[B1ADGD000013]
Q1491	DSA300100L	DSA300100L	$[DSA300100L]
Q1492	B1HBDFA00005	B1HBDFA00005	$[B1HBDFA00005]
QR1411	B1GDCFGN0021	B1GDCFGN0021	$[B1GDCFGN0021]
QR1491	B1GDCFLN0006	B1GDCFLN0006	$[B1GDCFLN0006]
R1161	27Ω[15]	$[15]	$[15]
R1162	$	0	0
R1163	0	$	$
R1164	$	0	0
R1165	$	0	0
R1261	D1JBR110A023	$[D1JBR110A023]	$[D1JBR110A023]
R1262	30K[D][15]	$[15]	$[15]
R1264	13K[D][15]	$[15]	$[15]
R1265	100[15]	$[15]	$[15]
R1361	$[15]	0[15]	0[15]
R1415	47K	47K	$
R1416	4700	4700	$
R1417	47K	47K	$
R1418	47K	47K	$
R1428	220K	220K	$
R1429	47K	47K	$
R1430	68K	68K	$
R1431	1500	1500	$
R1490	1K	1K	$
R1491	18K[15][D]	18K[15][D]	$[15]
R1492	47K[15][D]	47K[15][D]	$[15]
R1493	330[15][D]	330[15][D]	$[15]
R1494	20K[15][D]	20K[15][D]	$[15]
R1495	12K[15][D]	12K[15][D]	$[15]

Modify Category

	Variation	Type
1	HS700-NTSC	AN
2	HS700-E2	AP
3	HS700-E3	AQ
4	TM700-Do	BN
5	TM700-E1	CN
6	TM700-E2	CP
7	TM700-E3	CQ
8	SD700/SD707-NTSC	DN
9	SD700/SD707-E2	DP
10	SD700/SD707-E3	DQ
11	R2250-E1	EN
12	R2250-E2	EP
13	R2250-E3	EQ
14	R225F-E3	FQ

HDC-TM700/SD700/SD707
Power Section
(Main P.C.B. (9/9))
Schematic Diagram

3/4



HDC-TM700/SD700/SD707
Power Section
(Main P.C.B. (9/9))
Schematic Diagram

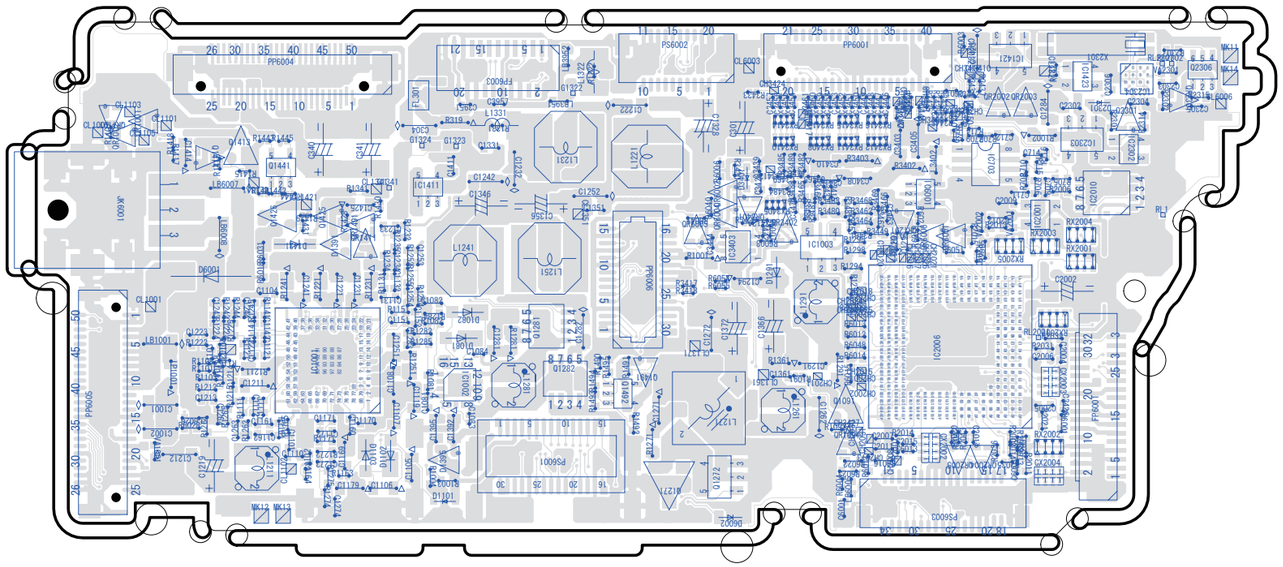
4/4

11 12 13 14 15 16 17 18 19 20 21

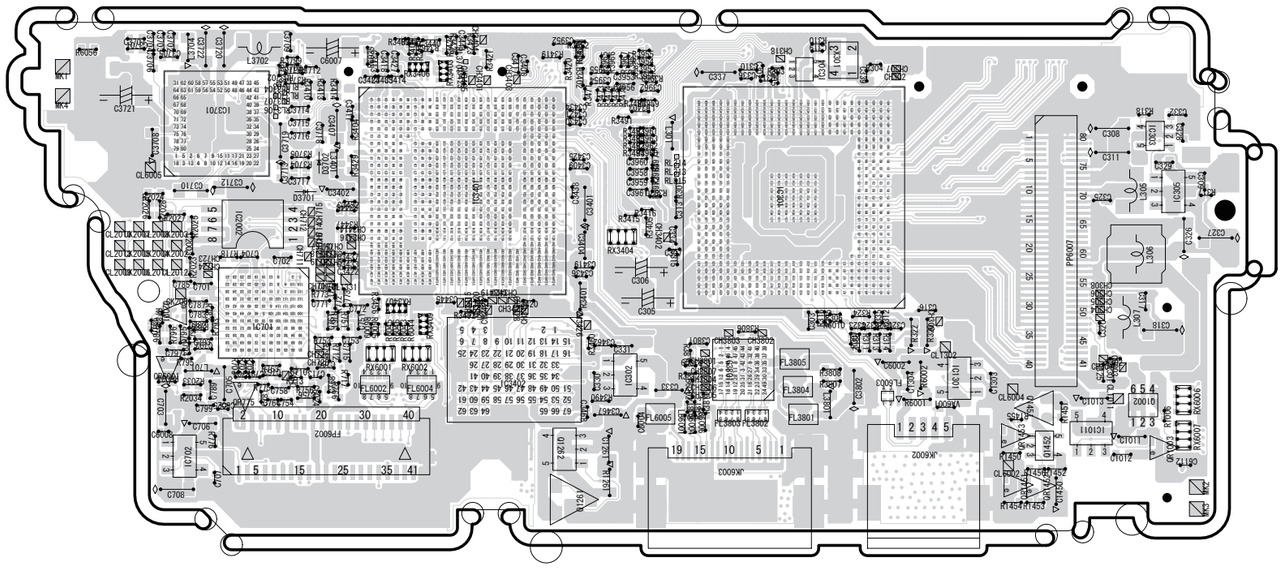
S5. Print Circuit Board

S5.1. Main P.C.B.

S5.1.1. Main P.C.B.



(Component Side)



(Foil Side)

HDC-TM700/SD700/SD707
Main P.C.B.

S5.1.2. Main P.C.B. Address Information

Main P.C.B. (1/2)

Integrated Circuit		
IC301	E-6	F
IC302	D-5	F
IC303	E-8	F
IC304	F-6	F
IC305	E-8	F
IC701	D-3	F
IC702	C-3	F
IC703	E-7	C
IC1001	D-3	C
IC1002	D-4	C
IC1003	D-6	C
IC1011	C-8	F
IC1301	D-7	F
IC1411	E-4	C
IC1421	F-7	C
IC1423	E-8	C
IC2001	E-8	C
IC2002	E-3	F
IC2006	D-7	C
IC2010	E-8	C
IC2302	E-8	C
IC2303	E-8	C
IC2304	E-8	C
IC3401	E-4	F
IC3402	D-5	F
IC3403	D-6	C
IC3701	E-3	F
IC3801	D-6	F
IC6001	E-7	C

Transistor		
Q1002	C-8	F
Q1091	C-7	C
Q1261	C-5	F
Q1262	C-5	F
Q1271	C-5	C
Q1272	C-6	C
Q1281	D-5	C
Q1282	D-5	C
Q1413	E-3	C
Q1414	E-3	C
Q1425	E-3	C
Q1426	E-3	C
Q1441	E-3	C
Q1451	C-8	F
Q1452	C-8	F
Q1491	D-5	C
Q1492	D-5	C
Q2001	D-3	F
Q2301	E-8	C
Q2306	F-9	C

Transistor-resistor		
QR775	D-3	F
QR1001	E-2	C
QR1002	E-2	C
QR1003	C-8	F
QR1091	C-7	C
QR1101	E-2	C
QR1291	E-7	C
QR1411	D-4	C
QR1451	C-8	F
QR1452	C-8	F
QR1453	C-8	F
QR1491	E-4	C
QR2002	E-7	C
QR2003	E-8	C

QR2004	C-7	C
QR2005	C-7	C
QR2301	E-8	C
QR3401	E-6	C
QR3402	E-6	C
QR6001	D-2	F
QR6002	E-6	C
QR6004	E-6	C
QR6005	E-6	C
QR6006	D-7	C
QR6051	D-7	C

Test Point		
CK2001	D-3	F
CK2002	D-3	F
CK2003	E-3	F
CK2004	D-2	F
CK2005	D-2	F
CK2006	D-2	F
CK2007	E-2	F
CL1001	D-2	C
CL1002	E-2	C
CL1011	C-8	F
CL1101	E-2	C
CL1102	C-3	C
CL1103	E-2	C
CL1104	D-3	C
CL1105	E-2	C
CL1302	D-7	F
CL1311	E-3	C
CL1321	F-8	C
CL1331	D-4	F
CL1341	E-4	C
CL1351	E-5	C
CL1361	D-6	C
CL1371	D-6	C
CL1421	E-3	C
CL2008	E-2	F
CL2009	D-2	F
CL2010	E-2	F
CL2011	D-2	F
CL2012	D-3	F
CL2013	D-2	F
CL6002	C-7	F
CL6003	F-6	C
CL6004	D-8	F
CL6005	E-2	F
CL6006	E-9	C
RL1	E-8	C
RL313	E-6	F
RL314	E-6	F
RL315	E-6	F
RL2001	D-8	C
RL2301	F-8	C
RL2302	F-8	C
RL3701	F-4	F
RL3702	E-3	F
RL3703	E-3	F
RL3704	E-3	F
RL3705	E-3	F
RL3706	E-3	F
RL3707	E-3	F

Connector		
FP6001	C-8	C
FP6002	C-3	F
FP6003	E-4	C
JK6001	E-2	C

JK6002	C-7	F
JK6003	C-6	F
PP6001	F-7	C
PP6004	F-3	C
PP6005	C-2	C
PP6006	D-5	C
PP6007	D-8	F
PS6001	C-5	C
PS6002	F-5	C
PS6003	C-7	C

Diode		
D1081	D-4	C
D1082	D-4	C
D1101	C-4	C
D1102	C-4	C
D1103	C-4	C
D1291	D-6	C
D1391	D-3	C
D1395	C-4	C
D1421	D-3	C
D2301	E-8	C
D3401	E-6	C
D3701	E-3	F
D3702	E-3	F
D6001	D-3	C
D6002	C-6	C

IC Protector		
IP1001	D-2	C

Crystal Oscillator		
X301	F-6	F
X2301	F-8	C

Coil		
L301	E-5	F
L305	E-8	F
L306	D-8	F
L307	D-8	F
L701	D-3	F
L1211	C-3	C
L1221	E-5	C
L1231	E-5	C
L1241	D-4	C
L1251	D-5	C
L1261	C-6	C
L1271	C-6	C
L1281	D-5	C
L1291	D-6	C
L1322	F-5	C
L1331	E-4	C
L3401	E-3	F
L3402	E-7	C
L3702	F-3	F
L3704	F-3	F
L3801	C-6	F
LB1001	D-2	C
LB3402	E-5	F
LB3403	E-5	F
LB3951	E-5	C
LB3952	F-5	C
LB6001	C-6	F
LB6002	D-6	F
LB6004	C-6	F
LB6005	C-7	C
LB6006	C-6	F
LB6007	E-3	C

LB6008	D-3	C

Thermistor		
TH6001	C-8	C

Filter		
FL301	E-4	C
FL3801	C-6	F
FL3802	C-6	F
FL3803	C-6	F
FL3804	D-6	F
FL3805	D-6	F
FL6002	D-4	F
FL6003	C-7	F
FL6004	D-4	F
FL6005	C-5	F

Capacitor		
C301	E-6	C
C302	F-6	F
C303	D-6	F
C304	E-4	C
C305	D-5	F
C306	D-5	F
C307	D-5	F
C308	E-8	F
C309	E-9	F
C310	F-6	F
C311	E-8	F
C312	D-7	F
C313	E-6	F
C314	E-6	F
C315	D-6	F
C316	D-7	F
C317	D-8	F
C318	D-8	F
C319	F-6	F
C320	D-8	F
C321	D-7	F
C322	D-7	F
C323	D-7	F
C324	D-7	F
C325	E-8	F
C326	D-9	F
C327	D-9	F
C328	E-9	F
C329	E-8	F
C330	D-5	F
C331	D-5	F
C332	E-9	F
C333	D-5	F
C334	D-6	F
C335	D-7	F
C336	E-6	F
C337	E-6	F
C339	E-7	F
C340	E-3	C
C341	E-4	C
C701	D-3	F
C702	D-3	F
C703	C-2	F
C704	D-3	F
C705	D-3	F
C706	C-3	F
C707	C-3	F
C708	C-3	F
C709	E-8	C
C710	D-3	F

C711	E-8	C
C712	E-7	C
C713	D-3	F
C714	E-8	C
C715	D-4	F
C716	E-7	C
C751	D-4	F
C753	D-4	F
C754	C-3	F
C756	C-3	F
C758	D-3	F
C761	D-3	F
C763	D-3	F
C764	C-3	F
C766	D-3	F
C768	D-3	F
C771	D-3	F
C772	D-4	F
C773	D-4	F
C781	C-3	F
C782	D-3	F
C783	D-3	F
C785	D-3	F
C786	D-2	F
C787	D-3	F
C789	D-3	F
C791	D-3	F
C792	D-3	F
C793	D-3	F
C795	D-3	F
C796	D-3	F
C797	D-3	F
C799	C-3	F
C1001	C-2	C
C1002	C-2	C
C1011	C-8	F
C1012	C-8	F
C1013	C-8	F
C1081	C-4	C
C1082	D-4	C
C1083	C-4	C
C1084	D-4	C
C1101	C-3	C
C1102	C-3	C
C1103	D-3	C
C1105	C-4	C
C1106	C-4	C
C1107	C-4	C
C1108	D-4	C
C1110	C-3	C
C1111	C-3	C
C1112	C-3	C
C1119	C-4	C
C1121	D-3	C
C1122	D-3	C
C1131	D-4	C
C1132	D-4	C
C1141	D-3	C
C1142	D-3	C
C1151	D-4	C
C1152	D-4	C
C1160	C-4	C
C1161	C-3	C
C1162	C-3	C
C1169	C-4	C
C1170	C-4	C
C1171	C-3	C

C1172	C-3	C
C1179	C-4	C
C1211	D-3	C
C1212	C-3	C
C1213	C-3	C
C1214	D-3	C
C1219	C-3	C
C1221	D-3	C
C1222	E-5	C
C1223	D-3	C
C1224	D-3	C
C1231	D-4	C
C1232	E-5	C
C1233	E-4	C
C1234	D-4	C
C1241	D-3	C
C1242	E-4	C
C1243	D-3	C
C1244	D-3	C
C1251	D-4	C
C1252	E-5	C
C1253	D-4	C
C1254	D-4	C
C1261	C-5	F
C1262	C-6	C
C1263	C-3	C
C1264	C-3	C
C1271	C-5	C
C1272	D-6	C
C1273	C-3	C
C1274	C-3	C
C1281	D-4	C
C1282	D-5	C
C1283	D-4	C
C1284	E-8	C
C1291	D-6	C
C1294	D-6	C
C1295	D-7	C
C1303	D-7	F
C1304	D-7	F
C1328	E-6	C
C1331	E-4	C
C1346	E-4	C
C1351	E-5	C
C1356	E-5	C
C1361	D-6	C
C1366	D-6	C
C1372	D-6	C
C1392	C-4	C
C1395	C-4	C
C1411	E-4	C
C1414	E-3	C
C1423	F-7	C
C1425	E-4	C
C1450	C-8	F
C2001	C-8	C
C2002	D-8	C
C2003	D-3	F
C2004	D-8	C
C2005	C-8	C
C2006	D-8	C
C2007	C-7	C
C2009	E-7	C
C2011	C-7	C
C2012	E-7	C
C2013	C-8	C
C2014	C-7	C
C2015	C-7	C

C2016	C-7	C
C2017	C-7	C
C2302	E-8	C
C2303	E-8	C
C2304	E-8	C
C2305	E-9	C
C2306	E-8	C
C3401	E-5	F
C3402	E-3	F
C3403	E-7	C
C3404	D-5	F
C3405	E-7	C
C3406	F-5	F
C3407	E-3	F
C3408	E-7	C
C3409	E-5	F
C3410	E-6	C
C3411	E-4	F
C3412	E-6	C
C3413	F-4	F
C3414	E-4	F
C3415	E-6	C
C3416	E-6	C
C3417	F-5	F
C3418	F-4	F
C3419	D-5	F
C3420	D-5	F
C3421	E-5	F
C3422	D-4	F
C3423	E-4	F
C3424	E-4	F
C3425	E-5	F
C3426	C-8	C
C3427	F-4	F
C3428	E-6	C
C3430	E-5	F
C3431	E-6	C
C3432	E-4	F
C3433	D-4	F
C3434	E-5	F
C3435	E-4	F
C3436	D-5	F
C3437	D-4	F
C3438	E-5	F
C3439	E-6	C
C3440	F-4	F
C3441	F-4	F
C3442	E-6	C
C3444	D-6	C
C3445	D-4	F
C3446	E-7	C
C3447	E-7	C
C3448	E-7	C
C3449	E-7	C
C3450	E-7	C
C3451	E-7	C
C3452	E-7	C
C3453	E-6	C
C3454	E-6	C
C3455	E-6	C
C3456	E-6	C
C3457	E-6	C
C3458	E-6	C
C3459	E-6	C
C3460	E-6	C
C3461	E-6	C
C3462	D-5	F
C3463	E-7	C

C3464	E-7	C
C3465	E-6	C
C3466	E-7	C
C3467	C-5	F
C3468	C-5	F
C3469	E-6	C
C3470	E-6	C
C3471	E-6	C
C3701	F-2	F
C3702	F-2	F
C3703	F-2	F
C3704	F-2	F
C3705	F-2	F
C3706	F-2	F
C3707	F-2	F
C3708	E-2	F
C3709	F-3	F
C3710	E-3	F
C3711	F-3	F
C3712	E-3	F
C3713	E-3	F
C3714	E-3	F
C3715	E-3	F
C3716	E-3	F
C3717	E-3	F
C3718	E-3	F
C3719	E-3	F
C3720	F-3	F
C3721	E-2	F
C3722	F-3	F
C3801	D-6	F
C3802	D-7	F
C3951	E-4	C
C3952	F-5	F
C3953	E-5	F
C3954	E-5	F
C3955	E-5	F
C3956	E-5	F
C3957	E-4	C
C3958	E-5	F
C3959	E-5	F
C3960	E-5	F
C3961	E-5	F
C3962	E-5	F
C6001	C-6	C
C6002	D-7	F
C6003	C-8	C
C6004	C-5	F
C6007	F-3	F
C6008	C-2	F
C6011	E-7	C
C6013	C-7	C
C6024	C-3	F
C6025	C-3	F
C6026	C-3	C
C6112	C-9	F
CX2002	C-7	C
CX2003	D-8	C
CX2004	C-8	C

Resistor		
R301	E-6	F
R302	D-8	F
R303	F-6	F
R304	F-7	F
R305	E-6	F
R306	D-6	F
R307	D-7	F

R310	F-6	F
R311	D-7	F
R312	D-7	F
R313	D-7	F
R314	D-7	F
R315	D-6	F
R316	D-6	F
R317	E-9	F
R318	E-8	F
R319	E-4	C
R320	D-7	F
R322	D-7	F
R324	D-7	F
R325	D-8	F
R701	D-3	F
R702	D-3	F
R703	D-3	F
R704	D-3	F
R705	E-8	C
R706	E-8	C
R707	E-7	C
R708	E-8	C
R709	E-7	C
R710	E-8	C
R711	D-3	F
R712	D-3	F
R713	D-3	F
R714	E-7	C
R715	E-8	C
R716	E-8	C
R717	D-4	F
R718	D-3	F
R719	E-7	C
R751	D-4	F
R753	D-3	F
R756	D-3	F
R761	D-3	F
R763	D-3	F
R766	D-3	F
R771	D-3	F
R772	D-3	F
R773	D-3	F
R775	D-3	F
R776	C-3	F
R783	D-3	F
R784	D-2	F
R785	D-3	F
R786	D-2	F
R793	D-3	F
R794	D-3	F
R795	D-3	F
R796	D-2	F
R1001	D-6	C
R1002	E-8	C
R1003	C-4	C
R1004	C-4	C
R1006	C-8	F
R1081	D-4	C
R1082	D-4	C
R1091	D-6	C
R1092	C-6	C
R1101	D-3	C
R1102	D-3	C
R1103	D-3	C
R1104	D-3	C
R1105	D-3	C
R1107	E-2	C
R1111	C-3	C

R1121	D-3	C
R1131	D-4	C
R1141	D-3	C
R1151	D-4	C
R1161	C-3	C
R1162	D-3	C
R1163	C-4	C
R1164	C-3	C
R1165	C-3	C
R1171	C-3	C
R1211	D-3	C
R1212	D-3	C
R1214	D-3	C
R1215	C-3	C
R1221	D-3	C
R1222	D-3	C
R1224	D-3	C
R1225	D-3	C
R1231	D-4	C
R1232	E-4	C
R1234	D-4	C
R1235	D-4	C
R1241	D-3	C
R1242	D-3	C
R1244	D-3	C
R1245	D-3	C
R1251	D-4	C
R1252	D-4	C
R1254	D-4	C
R1255	D-4	C
R1261	C-5	F
R1262	C-3	C
R1264	C-3	C
R1265	C-3	C
R1271	C-5	C
R1272	C-3	C
R1274	C-3	C
R1275	C-3	C
R1281	D-5	C
R1282	D-4	C
R1284	D-4	C
R1285	D-4	C
R1291	D-6	C
R1294	D-7	C
R1295	D-7	C
R1296	D-7	C
R1297	D-7	C
R1298	D-7	C
R1322	F-5	C
R1331	E-4	C
R1341	E-4	C
R1361	D-6	C
R1415	E-3	C
R1416	E-3	C
R1417	E-2	C
R1418	E-2	C
R1421	F-8	C
R1428	E-4	C
R1429	E-3	C
R1430	E-4	C
R1431	E-3	C
R1441	E-3	C
R1442	E-3	C
R1443	E-3	C
R1444	E-3	C
R1445	E-3	C
R1450	C-8	F
R1451	C-8	F

R1452	C-8	F
R1453	C-8	F
R1454	C-8	F
R1455	C-8	F
R1456	C-8	F
R1490	D-5	C
R1491	D-5	C
R1492	C-5	C
R1493	C-5	C
R1494	D-5	C
R1495	D-5	C
R2005	D-7	C
R2006	E-8	C
R2007	C-7	C
R2008	C-7	C
R2009	C-8	C
R2010	D-7	C
R2011	C-8	C
R2013	E-7	C
R2014	C-7	C
R2015	D-7	C
R2021	C-8	C
R2023	D-3	F
R2024	E-2	F
R2025	E-3	F
R2026	E-2	F
R2027	E-3	F
R2028	E-2	F
R2031	D-8	C
R2032	D-8	C
R2033	D-3	F
R2034	C-3	F
R2035	C-7	C
R2036	C-7	C
R2042	C-7	C
R2043	C-7	C
R2301	E-8	C
R2302	E-8	C
R2307	F-8	C
R2314	E-8	C
R2315	E-9	C
R3401	D-5	F
R3402	E-7	C
R3403	E-7	C
R3404	E-4	F
R3405	E-5	F
R3408	F-4	F
R3409	F-4	F
R3410	E-3	F
R3411	F-4	F
R3412	F-4	F
R3413	E-3	F
R3414	E-3	F
R3415	E-5	F
R3416	E-5	F
R3417	D-6	C
R3418	D-6	C
R3419	F-5	F
R3420	F-5	F
R3421	F-4	F
R3423	F-4	F
R3424	F-4	F
R3425	F-4	F
R3426	E-6	C
R3429	E-4	F
R3430	E-6	C
R3433	E-6	C
R3434	E-7	C

R3435	E-7	C
R3436	E-7	C
R3437	E-7	C
R3438	E-7	C
R3439	E-7	C
R3440	E-7	C
R3441	E-7	C
R3442	E-7	C
R3443	E-7	C
R3444	E-7	C
R3445	E-7	C
R3446	E-7	C
R3447	E-4	F
R3448	E-4	F
R3449	D-7	C
R3450	E-7	C
R3451	D-4	F
R3452	D-4	F
R3453	E-7	C
R3456	D-4	F
R3460	D-5	F
R3461	E-7	C
R3462	E-7	C
R3463	E-7	C
R3464	F-4	F
R3465	E-6	C
R3466	E-6	C
R3468	E-7	C
R3469	E-7	C
R3471	E-5	F
R3473	E-5	F
R3474	E-5	F
R3475	E-5	F
R3476	E-5	F
R3477	F-5	F
R3480	E-6	C
R3481	E-7	C
R3482	E-6	C
R3483	E-6	C
R3484	E-6	C
R3485	E-6	C
R3486	E-6	C
R3487	E-6	C
R3488	E-6	C
R3489	E-6	C
R3490	C-5	F
R3491	E-5	F
R3492	E-5	F
R3493	E-5	F
R3494	E-5	F
R3495	E-5	F
R3496	E-5	F
R3703	F-3	F
R3704	E-3	F
R3705	E-3	F
R3712	F-3	F
R3713	E-3	F
R3714	E-3	F
R3799	F-3	F
R3806	D-6	F
R3807	D-6	F
R3808	D-6	F
R3809	D-6	F
R3810	D-6	F
R3811	C-6	F
R3812	D-6	F
R3813	C-6	F
R3814	C-6	F

Address Information
C.....Component Side
F.....Foil Side

Main P.C.B. (2/2)					
R3952	F-5	F	RX3409	D-4	F
R3953	F-5	F	RX3410	E-6	C
R3954	F-5	F	RX3411	E-7	C
R3955	F-5	F	RX3412	E-7	C
R3956	E-5	F	RX3413	E-6	C
R3957	F-5	F	RX3414	E-6	C
R3959	E-5	F	RX3415	E-7	C
R3960	E-5	F	RX3416	E-7	C
R3961	E-5	F	RX6001	D-4	F
R3962	E-5	F	RX6002	D-4	F
R3963	E-5	F	RX6006	C-9	F
R3964	E-5	F	RX6007	C-9	F
R3965	F-5	F			
R3966	F-5	F	Varistor		
R3967	F-5	F	VA301	D-8	F
R3968	F-5	F	VA1001	C-2	C
R3969	E-5	F	VA2001	E-8	C
R3970	E-5	F	VA2002	E-7	C
R3971	E-5	F	VA2301	F-8	C
R3972	E-5	F	VA6001	C-7	F
R6001	C-7	F			
R6002	D-7	F	Ground Terminal		
R6003	F-7	C	G1322	E-5	C
R6004	C-6	C	G1323	E-4	C
R6005	D-4	F	G1324	E-4	C
R6006	E-6	C	G1341	E-4	C
R6007	E-6	C			
R6008	D-6	C			
R6009	D-4	F			
R6010	D-6	F			
R6012	D-7	C			
R6013	D-7	C			
R6014	D-7	C			
R6015	D-7	C			
R6016	C-7	C			
R6017	C-7	C			
R6018	D-3	C			
R6019	D-7	C			
R6021	E-7	C			
R6022	C-7	C			
R6023	C-7	C			
R6028	C-3	C			
R6031	D-3	C			
R6034	D-2	F			
R6035	F-4	F			
R6040	E-6	C			
R6041	E-6	C			
R6043	D-4	F			
R6044	D-4	F			
R6045	D-4	F			
R6046	D-4	F			
R6048	D-7	C			
R6051	D-7	C			
R6054	D-6	C			
R6055	D-6	C			
R6056	F-2	F			
RX2001	D-8	C			
RX2002	C-8	C			
RX2003	D-8	C			
RX2004	E-8	C			
RX2005	D-7	C			
RX2007	D-8	C			
RX3403	F-4	F			
RX3404	D-5	F			
RX3405	E-6	C			
RX3406	F-4	F			
RX3407	D-4	F			
RX3408	E-6	C			

Address Information
C.....Component Side
F.....Foil Side

S6. Replacement Parts List

Note:
1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
   Components identified with the mark ⚠ have the special characteristics for safety.
   When replacing any of these components, use only the same type.
3. Unless otherwise specified,
   All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICRO-FARADS (uf), P=uuF.
4. The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

E.S.D. standards for Electrostatically Sensitive Devices, refer to "PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
##	VEP03H98CP	MAIN PCB UNIT		TM700EG,EP,EF,EB,EC
				(RTL) E.S.D.
##	VEP03H98CQ	MAIN PCB UNIT		TM700EE,GC,GK (RTL) E.S.D.
##	VEP03H98CN	MAIN PCB UNIT		TM700P,PC,PU,GD (RTL) E.S.D.
##	VEP03H98DP	MAIN PCB UNIT		SD700EG,EP,EF,EB,EC,
				SD707EG (RTL) E.S.D.
##	VEP03H98DQ	MAIN PCB UNIT		SD700EE,GC,GN (RTL) E.S.D.
C301	F3G0J107A017	C.CAPACITOR CH 6.3V 100U	1	
C302	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C303	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C306	F3F0G476A030	E.CAPACITOR CH 4V 47U	1	
C307	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C309	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C310	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C311	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
C312	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C313	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C314	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C316	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C319	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C320	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C321	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C322	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C323	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C324	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C325	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C326	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
C333	F1H0J475A010	C.CAPACITOR CH 6.3V 4.7U	1	
C334	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C335	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C337	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
C339	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C702	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C703	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C704	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C705	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C706	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C707	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C708	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C710	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C713	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C715	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C751	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C753	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C754	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C756	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C758	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C761	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C763	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C764	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C766	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C768	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C771	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C772	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C781	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C782	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C783	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C785	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C786	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C787	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C789	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C792	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C793	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C795	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C796	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C797	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C799	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1001	F1J1A475A023	C.CAPACITOR CH 10V 4.7U	1	
C1002	F1J1A475A023	C.CAPACITOR CH 10V 4.7U	1	
C1011	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1012	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C1013	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1081	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1082	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C1083	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1084	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C1101	ECJ0EC1H101J	C.CAPACITOR CH 50V 100P	1	
C1102	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C1103	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C1104	ECJ0EB1C223K	C.CAPACITOR CH 16V 0.022U	1	
C1105	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1106	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1107	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
C1108	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1110	ECJ0EB1C562K	C.CAPACITOR CH 16V 5600P	1	
C1112	ECJ0EB1E332K	C.CAPACITOR CH 25V 3300P	1	
C1119	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
C1122	ECJ0EB1E471K	C.CAPACITOR CH 25V 470P	1	
C1132	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1141	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1142	ECJ0EB1E472K	C.CAPACITOR CH 25V 4700P	1	
C1152	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1170	ECJ0EB1C562K	C.CAPACITOR CH 16V 5600P	1	
C1172	ECJ0EB1A473K	C.CAPACITOR CH 10V 0.047U	1	
C1179	ECJ1VB1E104K	C.CAPACITOR CH 25V 0.1U	1	
C1211	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1212	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1213	ECJ0EB1E271K	C.CAPACITOR CH 25V 270P	1	
C1214	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1221	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1222	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1231	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1232	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1241	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1242	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1244	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C1251	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1252	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1271	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1272	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1281	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1282	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1283	ECJ0EC1H121J	C.CAPACITOR CH 50V 120P	1	
C1284	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1291	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1294	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
C1295	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C1303	F1G1H1020008	C.CAPACITOR CH 50V 1000P	1	
C1304	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C1328	F3F0J476A032	E.CAPACITOR CH 6.3V 47U	1	
C1372	F3F0G476A030	E.CAPACITOR CH 4V 47U	1	
C1392	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
C1395	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1411	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C1414	ECJ1VB1C105K	C.CAPACITOR CH 16V 1U	1	
C1423	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C1425	F1H0J475A010	C.CAPACITOR CH 6.3V 4.7U	1	
C1450	F1H0J475A010	C.CAPACITOR CH 6.3V 4.7U	1	
C2001	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C2002	F3F0J226A032	T.CAPACITOR CH 6.3V 22U	1	
C2003	F1G1C104A080	C.CAPACITOR CH 16V 0.1U	1	
C2004	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C2005	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2009	ECJ0EC1H221J	C.CAPACITOR CH 50V 220P	1	
C2011	F1G1C104A080	C.CAPACITOR CH 16V 0.1U	1	
C2012	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C2013	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C2014	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C2015	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C2016	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C2017	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C2303	F1G1C104A080	C.CAPACITOR CH 16V 0.1U	1	
C2304	F1G1C104A080	C.CAPACITOR CH 16V 0.1U	1	
C2305	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C2306	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3401	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C3403	F1H0J475A010	C.CAPACITOR CH 6.3V 4.7U	1	
C3404	F1H0J475A010	C.CAPACITOR CH 6.3V 4.7U	1	
C3405	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C3406	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3407	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C3411	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3412	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3413	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3414	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3416	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3420	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3421	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3422	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3423	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3424	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3425	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3426	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3428	F1G1C104A080	C.CAPACITOR CH 16V 0.1U	1	
C3430	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3431	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3432	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3433	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3434	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3435	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3436	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3437	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3438	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3439	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3440	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3441	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3442	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3444	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3445	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3462	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3463	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3464	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3465	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3466	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3468	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3469	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3470	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3471	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C3701	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3702	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C3703	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C3704	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C3705	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C3706	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C3707	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3708	F1H0J475A010	C.CAPACITOR CH 6.3V 4.7U	1	
C3709	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3710	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C3711	F1L1A103A008	C.CAPACITOR CH 10V 0.01U	1	
C3712	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C3713	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3714	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3715	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3716	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
C3717	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C3718	F1G1A104A012	C.CAPACITOR CH 10V 0.1U	1	
C3719	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C3720	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C3721	F3F0J226A032	T.CAPACITOR CH 6.3V 22U	1	
C3722	F1J0J106A049	C.CAPACITOR CH 6.3V 10U	1	
C3801	ECJ0EB1C103K	C.CAPACITOR CH 16V 0.01U	1	
C3802	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
C3951	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	(TM700)
C3952	ECJ0EC1H270J	C.CAPACITOR CH 50V 27P	1	(TM700)
C3953	ECJ0EC1H270J	C.CAPACITOR CH 50V 27P	1	(TM700)
C3954	ECJ0EC1H270J	C.CAPACITOR CH 50V 27P	1	(TM700)
C3955	ECJ0EC1H270J	C.CAPACITOR CH 50V 27P	1	(TM700)
C3956	ECJ0EC1H270J	C.CAPACITOR CH 50V 27P	1	(TM700)
C6001	ECJ0EC1H050C	C.CAPACITOR CH 50V 5P	1	
C6002	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
C6003	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C6004	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C6008	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C6024	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C6025	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
C6112	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
CX2002	F1L1E103A065	C.CAPACITOR CH 25V 0.01U	1	
CX2003	F1L1E103A065	C.CAPACITOR CH 25V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
CX2004	F1L1E103A065	C.CAPACITOR CH 25V 0.01U	1	
D1081	B0JCMD000052	DIODE	1	
D1082	B0JCMD000052	DIODE	1	
D1101	B0JCED000004	DIODE	1	
D1102	B0JCMD000052	DIODE	1	
D1103	B0JCMD000052	DIODE	1	
D1291	B0JCMD000052	DIODE	1	
D1391	B0ADCJ000097	DIODE	1	
D1395	B0JDCE000013	DIODE	1	
D1421	B0ACDJ000007	DIODE	1	
D2301	MA2SD320GL	DIODE	1	
D3401	B0JCED000004	DIODE	1	
D3701	B0JCED000004	DIODE	1	
D3702	B0JCED000004	DIODE	1	
D6001	B0ECKP000002	DIODE	1	
D6002	B3AAB0000322	LED	1	
FL301	F1H0J105A037	FILTER	1	
FL3801	F1H0J105A037	FILTER	1	
FL3802	J0ZZB0000122	FILTER	1	
FL3803	J0ZZB0000122	FILTER	1	
FL3804	F1H0J105A037	FILTER	1	
FL3805	F1H0J105A037	FILTER	1	
FL6002	J0HAYY000057	FILTER	1	
FL6003	EXC14CE900	FILTER	1	
FL6004	J0HAYY000057	FILTER	1	
FL6005	F1H0J105A037	FILTER	1	
FP6001	K1MN33AA0094	CONNECTOR 33P	1	
FP6002	K1MY41BA0235	CONNECTOR 41P	1	
FP6003	K1MY21BA0281	CONNECTOR 21P	1	(TM700)
IC301	C1AB00003305	IC	1	
IC302	C0DBGYY00885	IC	1	
IC304	C0JBAA000479	IC	1	
IC305	C0DBGFD00022	IC	1	
IC701	C1AB00003241	IC	1	
IC702	C0CBCDD00005	IC	1	
IC1001	C0DBAZZ00141	IC	1	
IC1002	VUEALLPT035	IC	1	
IC1003	C0DBAYY00756	IC	1	
IC1011	C0CBCDC00073	IC	1	
IC1301	C0CBCCC00157	IC	1	
IC1411	C0DBGGC00011	IC	1	
IC1421	C0DBGFD00023	IC	1	
IC1423	C0EBE0000237	IC	1	
IC2001	C0EBE0000442	IC	1	
IC2002	C3EBJC000100	IC	1	
IC2006	MNZSFD0RGA1	IC	1	
IC2010	C1ZBZ0003542	IC	1	
IC2302	C0EBJ0000149	IC	1	
IC2303	C0DBGYY00014	IC	1	
IC2304	C1ZBZ0004142	IC	1	
IC3401	VEK0P85	IC	1	
IC3402	確認		1	(SD700, SD707)
IC3402	[illegible]		1	(TM700)
IC3403	C1ZBZ0003961	IC	1	
IC3701	NN12924A-BB	IC	1	
IC3801	C1AB00003227	IC	1	
IC6001	C0JBAA000362	IC	1	
⚠ IP1001	K5H4021A0011	IC PROTECTOR	1	
JK6001	K2EZYE000004	JACK, DC IN	1	
JK6002	K2HZ105E0015	USB TERMINAL	1	
JK6003	K1FA119E0020	JACK, HDMI	1	
L301	G1C100MA0408	CHIP INDUCTOR 10UH	1	
L305	G1C100MA0072	CHIP INDUCTOR 10UH	1	
L306	G1C4R7MA0249	CHIP INDUCTOR 4.7UH	1	
L701	G1C100KA0115	CHIP INDUCTOR 10UH	1	
L1211	G1C100MA0393	CHIP INDUCTOR 10UH	1	
L1221	G1C100MA0426	CHIP INDUCTOR 10UH	1	
L1231	G1C100MA0426	CHIP INDUCTOR 10UH	1	
L1241	G1C100MA0426	CHIP INDUCTOR 10UH	1	
L1251	G1C100MA0426	CHIP INDUCTOR 10UH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L1271	G1C100MA0024	CHIP INDUCTOR 10UH	1	
L1281	G1C4R7ZA0222	CHIP INDUCTOR 4.7UH	1	
L1291	G1C220MA0393	CHIP INDUCTOR 22UH	1	
L3401	G1C100MA0408	CHIP INDUCTOR 10UH	1	
L3402	G1C100MA0408	CHIP INDUCTOR 10UH	1	
L3702	G1C4R7MA0073	CHIP INDUCTOR 4.7UH	1	
L3704	G1C100KA0115	CHIP INDUCTOR 10UH	1	
L3801	G1C100MA0408	CHIP INDUCTOR 10UH	1	
LB1001	J0JJC0000015	FILTER	1	
LB3402	J0JBC0000099	FILTER	1	(TM700)
LB3952	J0JYC0000051	FILTER	1	(TM700)
LB6001	J0JCC0000276	FILTER	1	
LB6002	J0JCC0000276	FILTER	1	
LB6004	J0JCC0000276	FILTER	1	
LB6005	J0JBC0000115	FILTER	1	
LB6006	J0JCC0000276	FILTER	1	
LB6007	J0JJC0000015	FILTER	1	
LB6008	J0JJC0000015	FILTER	1	
PP6004	K1KY50BA0252	CONNECTOR 50P	1	
PP6005	K1KY50BA0082	CONNECTOR 50P	1	
PP6006	K1KY30AA0384	CONNECTOR 30P	1	
PP6007	K1KY80AA0792	CONNECTOR 80P	1	
PS6002	K1KY20BA0095	CONNECTOR 20P	1	
PS6003	K1KY34BA0095	CONNECTOR 34P	1	
Q1002	B1CHQC000004	TRANSISTOR	1	
Q1091	B1ADGD000013	TRANSISTOR	1	
Q1271	B1DFCD000012	TRANSISTOR	1	
Q1272	B1DFBC000007	TRANSISTOR	1	
Q1281	B1CFPD000002	TRANSISTOR	1	
Q1282	B1CFPD000002	TRANSISTOR	1	
Q1413	B1ADGD000013	TRANSISTOR	1	
Q1414	DSC300100L	TRANSISTOR	1	
Q1425	DSC300100L	TRANSISTOR	1	
Q1426	B1ADGD000013	TRANSISTOR	1	
Q1441	B1HBDFA00005	TRANSISTOR	1	
Q1451	B1ADGD000013	TRANSISTOR	1	
Q1452	B1HBDFA00005	TRANSISTOR	1	
Q1491	DSA300100L	TRANSISTOR	1	
Q1492	B1HBDFA00005	TRANSISTOR	1	
Q2001	DSA300100L	TRANSISTOR	1	
Q2301	DSC300100L	TRANSISTOR	1	
Q2306	B1CFGD000003	TRANSISTOR	1	
QR775	B1GBCFGA0025	TRANSISTOR	1	
QR1001	B1GBCFGG0037	TRANSISTOR	1	
QR1002	B1GDCFNN0031	TRANSISTOR-RESISTOR	1	
QR1003	B1GBCFJN0037	TRANSISTOR-RESISTOR	1	
QR1091	B1GBCFJN0037	TRANSISTOR-RESISTOR	1	
QR1101	B1GBCFJJ0061	TRANSISTOR-RESISTOR	1	
QR1291	B1GBCFJN0037	TRANSISTOR-RESISTOR	1	
QR1411	B1GDCFGN0021	TRANSISTOR	1	
QR1451	B1GBCFJJ0061	TRANSISTOR-RESISTOR	1	
QR1452	B1GBCFJJ0061	TRANSISTOR-RESISTOR	1	
QR1453	B1GBCFJJ0061	TRANSISTOR-RESISTOR	1	
QR1491	B1GDCFLN0006	TRANSISTOR	1	
QR2002	B1GBCFJA0032	TRANSISTOR	1	
QR2003	B1GBCFJA0032	TRANSISTOR	1	
QR2004	B1GDCFJA0025	TRANSISTOR	1	
QR2005	B1GDCFJA0025	TRANSISTOR	1	
QR2301	B1GDCFNN0031	TRANSISTOR-RESISTOR	1	
QR3401	B1GBCFNL0017	TRANSISTOR-RESISTOR	1	
QR3402	B1GDCFNN0031	TRANSISTOR-RESISTOR	1	
QR6001	B1GDCFJA0025	TRANSISTOR	1	
QR6002	B1GDCFJA0025	TRANSISTOR	1	
QR6004	B1GDCFJA0025	TRANSISTOR	1	
QR6005	B1GDCFJA0025	TRANSISTOR	1	
QR6006	B1GDCFJA0025	TRANSISTOR	1	
QR6051	B1GDCFGA0019	TRANSISTOR	1	
R302	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R305	ERJ1GEJ272	M.RESISTOR CH 1/20W 2.7K	1	
R310	ERJ1GEJ101	M.RESISTOR CH 1/20W 100	1	
R311	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R312	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	
R313	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	
R314	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	
R317	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R324	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
R701	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
R702	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R703	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R704	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R711	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R712	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R713	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R714	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
R715	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
R717	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R718	ERJ2GEJ104	M.RESISTOR CH 1/10W 100K	1	
R751	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R753	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R756	ERJ2GEJ222	M.RESISTOR CH 1/10W 2.2K	1	
R761	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
R763	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R766	ERJ2GEJ222	M.RESISTOR CH 1/10W 2.2K	1	
R771	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R772	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R773	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
R775	ERJ1GEJ151	M.RESISTOR CH 1/20W 150	1	
R776	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R783	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R784	ERJ1GEJ223	M.RESISTOR CH 1/20W 22K	1	
R785	ERJ1GEJ153	M.RESISTOR CH 1/20W 15K	1	
R786	ERJ2GEJ104	M.RESISTOR CH 1/10W 100K	1	
R793	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R794	ERJ1GEJ223	M.RESISTOR CH 1/20W 22K	1	
R795	ERJ1GEJ153	M.RESISTOR CH 1/20W 15K	1	
R796	ERJ2GEJ104	M.RESISTOR CH 1/10W 100K	1	
⚠ R1001	D1JBR102A006	M.RESISTOR CH 1/16W 1K	1	
⚠ R1002	D1JB2R70A023	RESISTOR	1	
R1003	ERJ2GEJ473Y	M.RESISTOR CH 1/10W 47K	1	
R1004	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1006	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R1081	ERJ2GEJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1082	ERJ2RHD104	M.RESISTOR CH 1/16W 100K	1	
R1091	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R1092	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
R1102	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R1103	ERJ2RHD303	M.RESISTOR CH 1/16W 30K	1	
R1107	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R1111	ERJ2GEJ271	M.RESISTOR CH 1/10W 270	1	
R1121	ERJ2GEJ271	M.RESISTOR CH 1/10W 270	1	
R1131	ERJ2GEJ271	M.RESISTOR CH 1/10W 270	1	
R1141	ERJ2GEJ271	M.RESISTOR CH 1/10W 270	1	
R1151	ERJ2GEJ271	M.RESISTOR CH 1/10W 270	1	
R1162	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
R1164	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
R1165	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
R1171	ERJ2GEJ471	M.RESISTOR CH 1/10W 470	1	
⚠ R1211	D1JBR095A023	FUSE RESISTOR	1	
R1212	ERJ2RHD333X	M.RESISTOR CH 1/16W 33K	1	
R1214	ERJ2RHD153X	M.RESISTOR CH 1/16W 15K	1	
R1215	ERJ2GEJ101	M.RESISTOR CH 1/10W 100	1	
⚠ R1221	D1JBR084A023	FUSE RESISTOR	1	
R1222	ERA2AEB363	M.RESISTOR CH 1/16W 36K	1	
R1224	ERJ2RHD163	M.RESISTOR CH 1/16W 16K	1	
⚠ R1231	D1JBR095A023	FUSE RESISTOR	1	
R1232	ERJ2RHD133	M.RESISTOR CH 1/16W 13K	1	
R1234	ERJ2RHD163	M.RESISTOR CH 1/16W 16K	1	
⚠ R1241	D1JBR069A023	RESISTOR	1	
R1242	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
R1244	ERJ2RHD153X	M.RESISTOR CH 1/16W 15K	1	
R1245	ERJ2GEJ101	M.RESISTOR CH 1/10W 100	1	
⚠ R1251	D1JBR095A023	FUSE RESISTOR	1	
R1252	ERJ2RHD332X	M.RESISTOR CH 1/16W 3.3K	1	
R1254	ERJ2RHD153X	M.RESISTOR CH 1/16W 15K	1	
⚠ R1271	D1JBR110A023	FUSE RESISTOR	1	
R1272	ERJ2RHD392X	M.RESISTOR CH 1/16W 3.9K	1	
R1274	ERJ2RHD153X	M.RESISTOR CH 1/16W 15K	1	
⚠ R1281	D1JBR110A023	FUSE RESISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1282	ERA2AEB623	M.RESISTOR CH 1/16W 62K	1	
R1284	ERA2AEB153	M.RESISTOR CH 1/16W 15K	1	
R1285	ERJ2GEJ512X	M.RESISTOR CH 1/16W 5.1K	1	
⚠ R1291	D1JBR770A023	RESISTOR	1	
R1294	ERJ2GEJ103	M.RESISTOR CH 1/10W 10K	1	
R1295	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
R1296	ERJ2GEJ5R6X	M.RESISTOR CH 1/16W 5.6	1	
R1297	ERJ2GED563X	M.RESISTOR CH 1/10W 56K	1	
R1298	ERJ2GEJ104	M.RESISTOR CH 1/10W 100K	1	
R1331	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
R1361	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
R1415	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R1416	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
R1417	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R1418	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R1421	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R1428	ERJ1GEJ224	M.RESISTOR CH 1/20W 220K	1	
R1429	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R1430	ERJ1GEJ683	M.RESISTOR CH 1/20W 68K	1	
R1431	ERJ1GEJ152	M.RESISTOR CH 1/20W 1.5K	1	
R1441	ERJ1GEJ273	M.RESISTOR CH 1/20W 27K	1	
R1442	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R1443	ERJ1GEJ392	M.RESISTOR CH 1/20W 3.9K	1	
R1444	ERJ1GEJ224	M.RESISTOR CH 1/20W 220K	1	
R1445	ERJ1GEJ680	M.RESISTOR CH 1/20W 68	1	
R1450	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	
R1451	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R1452	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1453	ERJ2RHD123X	M.RESISTOR CH 1/16W 12K	1	
R1454	ERJ2RKD154	M.RESISTOR CH 1/16W 150K	1	
R1455	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R1456	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R1490	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R1491	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
R1492	ERJ2RHD473	M.RESISTOR CH 1/16W 47K	1	
R1493	ERJ2RHD331	M.RESISTOR CH 1/16W 330	1	
R1494	ERJ2RHD203	M.RESISTOR CH 1/16W 20K	1	
R1495	ERJ2RHD123X	M.RESISTOR CH 1/16W 12K	1	
R2005	ERJ2GEJ103	M.RESISTOR CH 1/10W 10K	1	
R2006	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	
R2007	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R2008	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R2009	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R2010	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R2011	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
R2013	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	
R2014	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	
R2021	ERJ2RHD152	M.RESISTOR CH 1/16W 1.5K	1	
R2024	ERJ2GEJ151	M.RESISTOR CH 1/10W 150	1	
R2025	ERJ2GEJ152	M.RESISTOR CH 1/16W 1.5K	1	
R2026	ERJ2GEJ151	M.RESISTOR CH 1/10W 150	1	
R2027	ERJ2GEJ151	M.RESISTOR CH 1/10W 150	1	
R2028	ERJ2GEJ151	M.RESISTOR CH 1/10W 150	1	
R2031	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
R2032	ERJ2GEJ182	M.RESISTOR CH 1/10W 1.8K	1	
R2033	ERJ2RHD683	M.RESISTOR CH 1/16W 68K	1	
R2034	ERJ2RHD203	M.RESISTOR CH 1/16W 20K	1	
R2042	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R2043	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R2301	ERJ2GEJ334	M.RESISTOR CH 1/16W 330K	1	
R2302	ERJ2GEJ102X	M.RESISTOR CH 1/16W 1K	1	
R2307	ERJ2GEJ105	M.RESISTOR CH 1/10W 1M	1	
R2314	ERJ2GEJ103	M.RESISTOR CH 1/10W 10K	1	
R2315	ERJ2GEJ105	M.RESISTOR CH 1/10W 1M	1	
R3405	ERJ2GEJ101	M.RESISTOR CH 1/10W 100	1	
R3408	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R3410	ERJ2RHD121	M.RESISTOR CH 1/16W 120	1	
R3412	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R3413	ERJ2RHD121	M.RESISTOR CH 1/16W 120	1	
R3414	ERJ2RHD121	M.RESISTOR CH 1/16W 120	1	
R3415	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
R3416	ERJ1GEJ220	M.RESISTOR CH 1/20W 22	1	
R3417	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R3418	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R3419	ERJ2RHD622	M.RESISTOR CH 1/16W 6.2K	1	
R3420	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R3421	ERJ2RKD330	M.RESISTOR CH 1/16W 33	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3423	ERJ2RHD303	M.RESISTOR CH 1/16W 30K	1	
R3424	ERJ2RHD303	M.RESISTOR CH 1/16W 30K	1	
R3425	ERJ2RHD153X	M.RESISTOR CH 1/16W 15K	1	
R3426	ERJ1GEJ330	M.RESISTOR CH 1/20W 33	1	
R3430	ERJ1GEJ273	M.RESISTOR CH 1/20W 27K	1	
R3447	ERJ2GEJ101	M.RESISTOR CH 1/10W 100	1	
R3448	ERJ2GEJ101	M.RESISTOR CH 1/10W 100	1	
R3449	ERJ2GEJ101	M.RESISTOR CH 1/10W 100	1	
R3451	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R3452	ERJ1GEJ272	M.RESISTOR CH 1/20W 2.7K	1	
R3453	ERJ1GEJ104	M.RESISTOR CH 1/20W 100K	1	
R3460	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R3461	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R3462	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3463	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3464	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
R3465	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3466	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3468	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3469	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3471	ERJ1GEJ101	M.RESISTOR CH 1/20W 100	1	(TM700)
R3473	ERJ1GEJ220	M.RESISTOR CH 1/20W 22	1	(TM700)
R3474	ERJ1GEJ220	M.RESISTOR CH 1/20W 22	1	(TM700)
R3475	ERJ1GEJ220	M.RESISTOR CH 1/20W 22	1	(TM700)
R3476	ERJ1GEJ220	M.RESISTOR CH 1/20W 22	1	(TM700)
R3477	ERJ1GEJ220	M.RESISTOR CH 1/20W 22	1	(TM700)
R3480	ERJ2RHD241	M.RESISTOR CH 1/16W 240	1	
R3481	ERJ2RHD241	M.RESISTOR CH 1/16W 240	1	
R3482	ERJ2RHD241	M.RESISTOR CH 1/16W 240	1	
R3483	ERJ2RHD241	M.RESISTOR CH 1/16W 240	1	
R3484	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3485	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3486	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3487	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3488	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3489	ERJ2RHD511	M.RESISTOR CH 1/16W 510	1	
R3703	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R3704	ERJ2RHD472X	M.RESISTOR CH 1/16W 4.7K	1	
R3705	ERJ2RHD472X	M.RESISTOR CH 1/16W 4.7K	1	
R3712	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R3713	ERJ2GEJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3714	ERJ2GEJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3799	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R3807	ERJ2GEJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3808	ERJ2GEJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3809	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
R3810	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R3811	ERJ2RHD432	M.RESISTOR CH 1/16W 4.3K	1	
R3812	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
R3813	ERJ1GEJ182	M.RESISTOR CH 1/20W 1.8K	1	
R3814	ERJ1GEJ182	M.RESISTOR CH 1/20W 1.8K	1	
R3952	ERJ1GEJ330	M.RESISTOR CH 1/20W 33	1	(TM700)
R3953	ERJ1GEJ330	M.RESISTOR CH 1/20W 33	1	(TM700)
R3954	ERJ1GEJ330	M.RESISTOR CH 1/20W 33	1	(TM700)
R3955	ERJ1GEJ330	M.RESISTOR CH 1/20W 33	1	(TM700)
R3956	ERJ1GEJ330	M.RESISTOR CH 1/20W 33	1	(TM700)
R3957	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	(TM700)
R3965	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	(TM700)
R3966	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	(TM700)
R3967	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	(TM700)
R3968	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	(TM700)
⚠ R6001	D1JBR084A023	FUSE RESISTOR	1	
⚠ R6002	D1JBR084A023	FUSE RESISTOR	1	
R6003	ERJ1GEJ563	M.RESISTOR CH 1/20W 56K	1	
R6004	ERJ1GEJ820	M.RESISTOR CH 1/20W 82	1	
R6005	ERJ1GEJ820	M.RESISTOR CH 1/20W 82	1	
R6006	ERJ2GEJ151	M.RESISTOR CH 1/10W 150	1	
R6009	ERJ1GEJ820	M.RESISTOR CH 1/20W 82	1	
R6010	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
R6013	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	(SD700, SD707)
R6014	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	(TM700)
R6015	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R6018	ERJ2GEJ224	M.RESISTOR CH 1/10W 220K	1	
R6019	ERJ1GEJ392	M.RESISTOR CH 1/20W 3.9K	1	
R6021	ERJ1GEJ101	M.RESISTOR CH 1/20W 100	1	
R6028	ERJ2GEJ820	M.RESISTOR CH 1/16W 82	1	
R6031	ERJ2GEJ683	M.RESISTOR CH 1/16W 68K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6034	ERJ2GEJ821	M.RESISTOR CH 1/10W 820	1	
R6035	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R6040	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
R6041	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
R6048	ERJ2GEJ220	M.RESISTOR CH 1/16W 22	1	
R6051	ERJ2GEJ181	M.RESISTOR CH 1/16W 180	1	
R6054	ERJ1GEJ222	M.RESISTOR CH 1/20W 2.2K	1	
R6055	ERJ1GEJ222	M.RESISTOR CH 1/20W 2.2K	1	
RX2001	EXB28V103JX	RESISTOR NETWORKS	1	
RX2002	EXB28V103JX	RESISTOR NETWORKS	1	
RX2003	EXB28V103JX	RESISTOR NETWORKS	1	
RX2004	EXB28V103JX	RESISTOR NETWORKS	1	
RX2005	D1H84734A024	RESISTOR NETWORKS	1	
RX2007	D1H84734A024	RESISTOR NETWORKS	1	
RX3403	D1H81034A048	RESISTOR NETWORKS	1	
RX3404	EXB28V220J	RESISTOR NETWORKS	1	
RX3405	D1H84734A048	RESISTOR NETWORKS	1	
RX3406	D1H81034A048	RESISTOR NETWORKS	1	
RX3407	D1H81034A048	RESISTOR NETWORKS	1	
RX3409	D1H84734A048	RESISTOR NETWORKS	1	
RX6001	EXB28V470JX	RESISTOR NETWORKS	1	
RX6002	EXB28V470JX	RESISTOR NETWORKS	1	
RX6006	D1H81014A024	RESISTOR NETWORKS	1	
RX6007	D1H81014A024	RESISTOR NETWORKS	1	
TH6001	D4CC11030013	THERMISTOR	1	
VA1001	D4ED1270A011	VARISTOR	1	
VA2301	D4ED16R80001	VARISTOR	1	
VA6001	D4ED18R00008	VARISTOR	1	
X301	H1A6005B0019	CRYSTAL OSCILLATOR	1	
X2301	H0J327200085	CRYSTAL OSCILLATOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks